

ENDANGERED SPECIES ACT AUTHORIZATIONS

HEARINGS
BEFORE THE
SUBCOMMITTEE ON
ENVIRONMENTAL POLLUTION
OF THE
COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE
NINETY-NINTH CONGRESS
FIRST SESSION
ON
S. 725

A BILL TO AUTHORIZE APPROPRIATIONS TO CARRY OUT THE ENDANGERED SPECIES ACT OF 1973 DURING FISCAL YEARS 1986, 1987, 1988, 1989, AND 1990

APRIL 16 AND 18, 1985

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ENDANGERED SPECIES ACT AUTHORIZATIONS

TUESDAY, APRIL 16, 1985

**U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION,
*Washington, DC.***

The subcommittee met at 10:50 a.m., in room SD-406, Dirksen Senate Office Building, Hon. Steve Symms, presiding.

Present: Senators Chafee, Simpson, Symms, Mitchell, and Baucus.

OPENING STATEMENT OF HON. STEVE SYMMS, U.S. SENATOR FROM THE STATE OF IDAHO

Senator SYMMS. Good morning. Senator Chafee is tied up at a leadership meeting at the White House so we are going to go ahead and start.

We have many witnesses this morning with Senator Wallop being our first witness.

Senator Wallop, we welcome you here. Would you please come up to the table?

I would ask unanimous consent that, at an appropriate place in the record, Senator Chafee's opening statement be inserted. He may wish to give it when he arrives.

As most of you know, the current authorization for appropriations to implement the Endangered Species Act will terminate September 30, 1985. On March 20, 1985, several members of the committee introduced S. 725, a bill to reauthorize the act for 5 years.

The bill was introduced without amendments in part as a vehicle for discussion and in part as a reflection of our judgment that no amendments are warranted at this time. That is a quote from Senator Chafee's opening statement. I think that is important to set the stage of why this hearing is being held.

We are delighted to have as our first witness this morning our distinguished Senator from Wyoming who has had a great deal of experience in both the Congress and in his occupation, a rancher in Wyoming. He has a great affinity for the west, for the land, for the environment on that land, and for the wildlife that live on that land.

So Senator Wallop, we welcome you this morning. We look forward to hearing your testimony.

**STATEMENT OF HON. MALCOLM WALLOP, U.S. SENATOR FROM
THE STATE OF WYOMING**

Senator WALLOP. Thank you very much, Mr. Chairman.

I have a longer written statement which I would ask be included in the record, together with four resolutions from the States of Wyoming, Utah, Colorado, and Nebraska which more or less mirror the request that I am about to make of the committee.

Hello, Mr. Chairman. You have been released from your bond. I was told you were tied up at the White House.

Senator CHAFEE [presiding.] Thank you. I apologize to you, Senator Wallop, and everybody else for being late. So please continue.

Senator WALLOP. Thank you, sir.

Mr. Chairman, I appreciate the opportunity to appear before the subcommittee as it begins hearings on reauthorization of the Endangered Species Act. My appearance today is prompted by a genuine and deep concern for the growing conflict between implementation of the act and water consumption.

No region and no State is immune from this basic conflict. However, as one might expect, it is first appearing in water-short States, including my State of Wyoming.

Our particular problems stem from the existence of endangered fishes in the downstream segments of the Colorado River and the migratory habitats of the whooping crane in the downstream segment of the Platte River. Together these two large river systems drain approximately half of the land area of the States of Wyoming and Colorado, a large part of Nebraska and Utah, and a section of New Mexico.

In the absence, and I stress this, in the absence of evidence to support a cause and effect relationship, the Fish and Wildlife Service has adopted the hypothesis that certain flow regimes are necessary for survival and recovery of these species. Consequently, in their eyes, any change in the historic flow, even that caused by a diversion in a distant state, is suspect.

Because of the great distances between the affected habitat and the diversion of water—often hundreds of miles—the interrelationship of surface and ground water, and the existence of return flow, most of these upstream diversions cannot be shown to have a directly adverse effect on the species or their habitat.

Nonetheless, because of the strict mandates of the act, the Service has required mitigation from each upstream water divert. This process is generally referred to as the Windy Gap approach.

Given the lack of cause and effect information, it is a reasonable interim, and I stress interim, approach to the protection of the species. I say interim because though it protects the species under the act, it does not do so in concert with water resource allocation systems. Finding and implementing the least disruptive alternative to species protection, achieving this concert, is and should be a strong ancillary goal of the act.

Last year Secretary Clark established a State-Federal working group to examine this conflict on the Colorado River and to develop a recovery plan which protects the species in the least disruptive manner.

I might add, Mr. Chairman, that you were helpful in getting us to create that solution, and we passed it through the Senate and it did not survive conference. But the Senate did follow suit and it offered funds and legislative direction to speed up and encourage that process. Though this appropriations rider was deleted in conference with the House, the working group has progressed and results are expected by later this year.

A similar working group has recently been formed to consider the similar conflict on the Platte. These working groups are attempting to resolve conflicts, the nature and scope and complexity of which may not have been apparent to the framers of the Endangered Species Act.

Nonetheless, the act may be flexible enough to allow conservation of the species in concert with the water allocation system. If not, I am hopeful that these working groups within the next 2 years will reveal to Congress what new authorities are necessary. If additional authority is necessary, I am confident that it will not weaken the act's protection but will strengthen it by reducing unnecessary conflict.

In light of this conflict, an administrative effort to have 2-year authorization of the act is necessary, so Congress can revisit this serious conflict when appropriate. I further urge this subcommittee to sanction the Windy Gap approach and encourage the working group efforts of the Fish and Wildlife Service.

Saving and recovering threatened and endangered species from extinction will often take a commitment of scarce resources. Water, though its supply is both vital and diminishing, is no exception. The approach I support here today is not directed toward getting western water users off the hook at the expense of any species. It is directed toward ensuring that if water is needed for a species, no more water than necessary is acquired under section 5 of the act, that the least restrictive and least expensive alternatives are utilized, that State laws and interstate compacts and decrees which already mandate certain instream flows are respected, that funding of mitigation activities is equitably apportioned.

If this subcommittee is sensitive to this conflict by encouraging ongoing administrative efforts and continued frequent oversight, I am hopeful these conflicts may be resolved administratively and that the act can be implemented without further ancillary disputes that have threatened it in the past.

I thank you, Mr. Chairman, for giving me the opportunity to present my views. I would like to submit the full text of my testimony for inclusion in the record, together with the four resolutions from the Legislatures of the States of Utah, Wyoming, Colorado, and Nebraska.

Senator CHAFEE. Thank you very much, Senator Wallop. I appreciate that. As you know, we worked together 1 year ago. As you mentioned, it did not survive in conference. Let's see what we can do.

I have some problems with the 2-year reauthorization, which I know is one of the points you made. The difficulty, of course, is that we have a pretty full menu, as you know, having served on this committee. When we have such short reauthorizations, it

means we are plowing the same field so frequently. But in any event, let's take a look at it. I appreciate your statement.

Senator WALLOP. May I suggest, sir, what we are trying to do is avoid replowing the field. This is a problem which you recognize as existing and Senator Simpson put in section 2(c)(2) in the hopes of guiding a more cooperative resolution. But it has now been determined, for example, that the problems of the Colorado River fish are less to do with stream flows than they are to do with the previous activities of the Fish and Wildlife Service which wrote endangered on 500 miles of the river to get rid of them, which has established the sports fishery, and the bass are the primary predators of the humpback chub and other things that are in there. So stream flow is less of it.

I am suggesting that the solutions that are taking place today are not solutions and they cannot go along much longer. We are worried that in the absence of a 2-year authorization and the opportunity to hear from these working groups about what they have discovered, that you will get yourself into a series of very complex judicial decrees which conflict with one another. We have the opportunity to now reach clearly and quickly to administrative solutions that may be found within the act.

Senator CHAFEE. Let us consider that. I appreciate your coming.

We also have here the letter that you and the others sent, including three members of this committee. We laud you for getting Jake Garn's signature yesterday. That must have been quite difficult.

Senator WALLOP. It happened a little while ago. It was others that took longer.

Mr. Chairman, can I ask one other thing? In the midst of all your busy times, take a look at the entire statement that I have prepared for this because it sets out in some detail the nature of the problems we confront.

Senator CHAFEE. Sure. We certainly will do that.

Senator Symms, any questions?

Senator SYMMS. Mr. Chairman, I don't want to delay Senator Wallop. I guess my question may be more in the form of a statement. I don't know as we can do anything about it per se except that my appeal to the managers of the Endangered Species Act would be to use a lot of caution and common sense. I think we go overboard, personally. When they fly grizzly bears in, for example. If one walks over from Wyoming or Montana into Idaho, that is one thing, but they actually give these things a ticket on a helicopter and bring them over to Idaho. Then they start managing the land and give the grizzly bears a priority over any other use of the land.

To my way of thinking, that is far from commonsense. I think that we can overdo this perpetuation of the Endangered Species Act by giving those kinds of priorities. They are just outright foolhardy, in my opinion.

I don't know if the Senator has any comments he would want to make on that. We are going to hear from the sheep and cattle industry later today. But I am told these grizzly bears can really raise havoc with a herd of sheep.

Senator WALLOP. Since the direction is out of Wyoming and into Idaho, I may not feel comfortable answering.

Senator SYMMS. I would just like to see us at least examine the possibility, and the chairman I know doesn't want amendments, but I would like to examine the possibility of somehow moderating our attitude on it. Somebody up in the Boise National Forest found a dead German shepherd dog and claimed it was a wolf and now we have a wolf area up there, it just goes on and on, that that is an endangered species. Then the wolves have priority over any other use of the land. You can't get a timber permit filed because then they can file a postcard lawsuit. You don't need a lawyer, just a postcard and \$5 and you can stop it.

I would like to see us somehow put a statement in this that we would like to preserve some of these historic and traditional species, but we would also like to have a little common sense about it, not necessarily give them a complete priority.

That is my statement for openers, Mr. Chairman. If Senator Wallop had any comments on that, I would appreciate it.

Senator WALLOP. I happen to be one who is persuaded that there can be very effective means under the act taken to ensure the survival of endangered or threatened species without total abandonment of other traditional and historic uses. The problem is those are more difficult than the easy route which has sometimes been taken in these areas. I think particularly the water area it has been easier simply to take people's water rights than it has been to do the more complicated procedures under section 5 of the act or the more complicated procedures such as determining the actual need.

Just, for example, in the Platte River, one of the problems is not really stream flow but regulated flow. In the last 2 years, we have had extra high runoffs and the runoffs in fact have done more to diminish the whooping cranes' and sandhill cranes' habitats than the diminished flow has because they can only roost in 8 inches of water. If it gets deeper than that, they can't spend the night where they are supposed to and they are weakened rather than strengthened.

So there are other ways and they are just more complicated and take more time. But I think the long-term survival of the species and the usefulness of the act, which I support, it is probably better to go this slower, more complex way.

Senator CHAFFEE. Senator Baucus.

Senator BAUCUS. No questions, thank you.

OPENING STATEMENT OF HON. JOHN H. CHAFFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFFEE. Thank you very much for coming, Senator. We appreciate it. It has been very helpful.

I have a statement which I will submit for the record. Let me just briefly say that we have had 12 years of experience with this act. We made some amendments in it 5 years ago, in 1981. During that period, some 10 months, we worked diligently and I believe successfully to bring out a bill we all could live with. That bill had success on the floor.

Originally the act passed in 1973, passed the Senate 92 to 0 and only 12 opposing votes in the House. The same thing happened in 1980, the bill we worked on in 1981, which we actually passed in 1982, with nearly unanimous bipartisan support.

I think this statute we are working on is one of the Nation's most farsighted environmental protection laws, not only for us, but it is a model for the world as well. Frankly, I think that one of the great traditions of this committee has not only been that we have set standards for the United States and done all we could to go forth with our responsibilities in the United States, but also I think we have been somewhat of a beacon for the world as well. Other nations emulate what the United States does. If we fall backward, retreat, then it has severe impacts on the rest of the world.

The Endangered Species Act has been generally successful in addressing short-term objectives, and at the same time I do not support the assertion that the act has seriously affected the growth of American industry.

Most of the problems and issues we will consider today and Thursday, our next hearing is on Thursday, appear to have arisen more from implementation of the act than from legislation itself. So I do ask for cooperation in providing the appropriate facts for our consideration and specific suggestions regarding modifications to the statute that will help it work more smoothly and effectively. As in all hearings, we want specifics, not generalities, like it is raising cane with development. That is not adequate for us. We want to hear how and when and where.

As perhaps most of you know, I believe that further legislative changes in the act are not needed. We amended the law significantly in 1978, 1979, and again in 1982. I think we have to give the law time to work. I think we have to focus on how the law is being and should be administered rather than trying to change the rules of the game once more.

We have gotten into the reauthorization in the discussion with Senator Wallop. We provide in this bill a 5-year reauthorization. The House is considering a 3-year reauthorization. The administration has a preference for a 4-year. Obviously, there is room for compromise.

I have great problems, as I mentioned to Senator Wallop, with a 2-year reauthorization, principally because of the agenda and the backlog of major laws that this committee struggles with. We have real problems dealing with short-term authority regulations.

[Senator Chafee's written statement follows:]

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Good morning. I'd like to welcome everyone here to the first of two hearings on reauthorization of the Endangered Species Act.

As most of you know, the current authorization for appropriations to implement the Endangered Species Act will terminate on September 30, 1985. On March 20, 1985, several members of this committee introduced S. 725, a bill to reauthorize the act for 5 years. The bill was introduced without amendments, in part, as a vehicle for discussion and, in part, as a reflection of our judgment that no amendments are warranted at this time.

We have now had more than 12 years experience with the act. Hearings for the last reauthorization process began in December 1981 amidst considerable controversy. Over the subsequent 10 months we worked diligently and successfully to pass an

amended bill that we could all live with. Now we meet again to examine how the act has been implemented, what is working and what is not, and what, if any, legislative changes are needed. We were successful in reaching agreement in 1982 because we dealt in the arena of facts and intellectually honest discussion. I hope we can maintain this high standard as we reconsider this important piece of legislation.

This act addresses an issue of deep concern to all of us. In 1973, the act passed the Senate with a vote of 92 to 0 and drew only 12 opposing votes in the House. This nearly unanimous bipartisan support was repeated in 1982, despite several intervening years of controversy. Amendments to the act in the past have increased its flexibility and responsiveness to concerns of all who are involved with its implementation. Yet, its original purpose has not been compromised.

This statute is one of the Nation's most farsighted environmental protection laws. It is also an important model for wildlife protection worldwide. It seeks to remedy the dramatic increase in the rate of plant and animal extinctions that is caused by our collective abuse of the environment, abuses that take the form of exploitation, alteration of habitat, and pollution.

Accepting the very real financial constraints within which we have worked, the Endangered Species Act has been generally successful in addressing its short term objectives. At the same time, the facts do not support the assertion that the act has seriously affected the growth of American industry. Instead, we have developed our ability to minimize conflicts and explore alternatives that avoid jeopardy to listed species.

Most of the problems and issues we'll consider today and Thursday appear to have arisen more from implementation of the act than from the legislation itself. I ask your cooperation in providing the appropriate facts for our consideration and specific suggestions regarding modifications to the statute that would help it to work more smoothly and effectively.

As I stated earlier, I believe at this time that further legislative changes are not needed. Having amended the law significantly in 1978, 1979 and again in 1982, we need to give the law time to work. We should now focus on how the law is being and should be administered rather than trying to change the rules of the game once more.

A straightforward, simple reauthorization, such as S. 725, is, in my judgment, the best way to proceed this year. Our bill provides for a 5-year reauthorization. The House is considering a 3-year period and the administration has stated their preference for a 4-year bill. Obviously there is room to compromise. I have problems with any shorter period. This committee's agenda and backlog of major laws that need to be reauthorized simply will not allow us to spend our time working on a bill of such short duration.

Senator CHAFEE. We have a distinguished panel next. If you would come forward and start at this end of the table, the left end of the table as you face it, with Mr. Buterbaugh, Regional Director of U.S. Fish and Wildlife. Nice to see you here again, Galen. Mr. William McDonald, director of the Colorado Water Conservation Board and vice chairman of the Western States Water Council; Mr. Hobbs from the Colorado Water Congress in Denver; Mr. James Martin, staff attorney for EDF; and Dr. Robert Davison, legislative representative of the National Wildlife Federation.

Gentlemen, you each have statements. Senator Symms, do you have a statement you wish to give now?

Senator SYMMS. No, Mr. Chairman, I don't. Thank you.

Senator CHAFEE. Why don't we proceed. Why don't you proceed, Mr. Buterbaugh. We will give each witness 5 minutes with his statement. Don't feel we would be offended if you didn't use the full 5 minutes.

Just before you start, Mr. Buterbaugh, Senator Simpson is here. Do you have a statement you wish to put in?

OPENING STATEMENT OF HON. ALAN K. SIMPSON, U.S. SENATOR FROM THE STATE OF WYOMING

Senator SIMPSON. Mr. Chairman, I will put it in the record.

I thank you for having this hearing. I understand my good colleague from Wyoming just left. I tried to be here for that, but you and I were at a similar meeting in the White House.

I just think it is important to try to address in the Endangered Species Act that indeed there are two serious issues of water and western water. It is not a partisan thing at all, it is a regional thing—you know so well how those can develop—and then the issue of the grizzly population and dealing with that.

If we go to a 5-year authorization, I think we will perhaps have some problems there, but I look forward to working with you. There are a couple of regional issues with regard to water and downstream use and the issue of threatened species versus endangered species. There is a lot of difference when you come to the grizzly, and I want to work with you on that. I pledge you that I shall, as we have in the past.

I thank you for holding these hearings. I would ask that the remainder of my remarks be placed in the record.

Senator CHAFEE. Certainly.

[Senator Simpson's statement follows:]

OPENING STATEMENT OF HON. ALAN K. SIMPSON, U.S. SENATOR FROM THE STATE OF WYOMING

Mr. Chairman, it seems as yesterday when this committee first reauthorized the Endangered Species Act. However, the time has slipped by and certain problems relating to the Endangered Species Act have become more acute in the West. The Endangered Species Act has provided a legal framework for the protection of some of the Earth's most precious resources—vanishing plant and wildlife species. The Endangered Species Act has also caused some vexatious and complicated conflicts to occur in the Western United States. I am concerned that certain environmental groups have distorted the original intent of the Endangered Species Act and are now using the act effectively to stop any kind of development and activity—be it recreational or commercial. Several western Senators and Governors of both parties have tried to formulate a means of resolving endangered species conflicts. During the last Congress, my fine friend of many years, Senator Wallop successfully offered an amendment to create an advisory committee that would develop means of mitigating conflicts between western water rights and endangered species protection. Unfortunately, that legislation was deleted in a conference committee in the waning days of the Congress. However, the Interior Department was able to accomplish these same goals through administrative action and this group is functioning now. We are advised that it should take about another year and a half for the group to come up with recommendations on how best to mitigate endangered species/water rights conflicts. For that reason I believe that we should not press for a 5-year reauthorization at this time but should keep the time limit to 2 years or less in order that this working group can have a thoughtful impact on this legislation. The time for solving western problems is not somewhere off in the future—it is now. We must grapple with these issues and we must come up with ways of making an endangered species act work for the benefit of species and the public.

Another area that causes me a great deal of concern is management of the grizzly bear—a threatened species. Some people do not recognize that there is indeed a difference between a threatened and an endangered species. In addition, many people do not recognize the inherent problems that go with managing a large predator such as a grizzly bear or a wolf. I think it is sometimes very useful to keep in mind that grizzly bears do eat people and they do cause damage and they go on rampages that is their nature. They are not nature's nice little furry beasts. This doesn't mean that they should not be protected, only that if the population isn't critically low, perhaps a limited hunt may be a very useful wildlife management tool. The pros will know.

Senator Chafee and I conducted a field hearing on grizzly bear management in Cody, WY, several years ago. Since that time the interagency grizzly bear committee has maintained the status quo in regard to grizzly management and the result has been an increase in human-bear conflicts and a great deal of confusion about the actual population size in the Yellowstone ecosystem.

We need some changes in grizzly bear management policy and perhaps the only way to arrive at those changes is to amend the Endangered Species Act. No one is a greater supporter of the grizzly bear recovery effort than I am. But I do recognize a need to accommodate recovery efforts with "real world" situations. Here again, it is time to address problems we have in the west creatively in order to come up with some solutions that benefit animals and the public at the same time.

In closing I would say that the Endangered Species Act is a very important piece of environmental legislation that has resulted in saving many exotic and non-exotic species. However, in the west at least, there is a growing concern that misapplication of the Endangered Species Act is resulting in a backlash against this act. If the public is alienated because of the Endangered Species Act, it is the species that will ultimately suffer. We must take steps to assure that does not happen.

Senator CHAFFEE. Senator Mitchell, do you have a statement you wish to make?

Senator MITCHELL. Mr. Chairman, I just want to say that I look forward to working with you on this important legislation.

Senator CHAFFEE. We are delighted you are here. You have been interested in this whole area. We look forward to your assistance as we proceed.

All right, Mr. Buterbaugh.

STATEMENT OF GALEN BUTERBAUGH, REGIONAL DIRECTOR, U.S. FISH AND WILDLIFE SERVICE

Mr. BUTERBAUGH. Thank you.

Mr. Chairman, and members of the subcommittee, my name is Galen Buterbaugh. I am Regional Director of U.S. Fish and Wildlife Service's Denver region. It is my pleasure to be here today to describe the Service's involvement in the complex issue of the Endangered Species Act and water development in the West, particularly in the Upper Colorado River Basin in Colorado, Utah, and Wyoming. My presentation summarizes a more detailed statement which has been submitted for the record.

Construction and operation of water development projects in the Colorado River Basin are associated with the decline in abundance and distribution of three endangered fishes: The Colorado River squawfish, the humpback chub, and the bonytail chub. These water projects have altered the riverine habitat by reducing spawning and rearing areas and altering river channel characteristics, thereby affecting water temperature, salinity and turbidity, and obstructing the migration of fish.

Section 7 of the Endangered Species Act requires Federal agencies to consult with the Secretary of the Interior to insure that agency actions are not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction of their habitat.

Section 7 consultation on water development projects in the upper basin was first initiated in 1977. The 14 jeopardy biological opinions issued from 1977 to 1980 were based on the best, but limited, biological data available. Additional biological studies were needed to determine habitat requirements for the endangered fishes, so in 1978 the Bureau of Reclamation and U.S. Fish and Wildlife Service initiated a 3-year Upper Colorado River fishery study.

The Service completed 80 consultations on water-related projects in the Upper Basin from 1977 to 1985. In 1981, a consultation ap-

proach known as the Windy Gap procedure was developed to assist in fishery research studies and to prevent jeopardy for this and other projects. Some 33 Windy Gap-type opinions were issued which could result in flow depletions of approximately 416,000 acre-feet, including depletions from both the Green and Colorado River drainages.

Since Windy Gap opinions required payment only upon depletion, the Service has actually received approximately \$772,000 and expended all but about \$34,000 for fishery research projects. If all depletions occur, we expect to receive over \$3 million. More recent opinions require some immediate funding for conservation measures to assure the reduction of project impacts on the listed fish.

The Service initiated development of a comprehensive long-range management plan for the conservation and recovery of the three listed fishes in the upper basin in May 1982. A preliminary draft issued in June 1983 resulted in considerable controversy with water development interests over the effects flow criteria presented in the plan would have on established water rights and uses in the upper basin.

Subsequently, the Service in concert with the involved Federal, State, public, and private entities established an Upper Colorado River Basin Coordinating Committee. The committee is composed of two Bureau of Reclamation regional directors, the regional director of the Fish and Wildlife Service, Department of Natural Resource directors from the States of Colorado and Utah, and a representative from the Wyoming Governor's office. Mr. Frank Dunkle, U.S. Fish and Wildlife Service, is the executive director of the committee. Mr. Dunkle is here with me today and available to answer questions.

The committee's goal is to develop a solution to the endangered fish species needs and water use that acknowledges the States' water rights systems and interstate water compacts.

The Coordinating Committee set up a Steering Committee and Subcommittees on Biology and Hydrology that included representatives of the water development and conservation agencies such as the Colorado Water Congress, National Audubon Society, and the Colorado Wildlife Federation.

The subcommittees have worked hard to review and compile data and determine the types of flow regimes that may be required to manage the fish and water resources in the upper basin. Promising state-of-the-art biological and hydrological modeling techniques are being tested and implemented in this effort.

Some of the management alternatives being considered are: Managing the operation of existing reservoirs to provide improved habitat conditions for endangered fish; acquiring water rights and storage; modifying structures to provide for fish passage for migration; augmentation of endangered fish populations at specific locations; and modifying physical habitat.

We expect to have a preliminary draft plan by the end of June 1985 and a detailed draft plan by the end of September 1985 that will address needs and procedures to be followed, monitoring programs needed, and a proposed management scenario for the upper basin. Following that, we hope to see an actual management plan developed and implemented for the endangered fishes that will also

provide for water development in the basin. We believe this is a task that can be accomplished.

Looking ahead to future consultation activity, we plan to request time extensions on any large depletion until the committee plan is formulated. In addition, the Windy Gap approach will be phased out as biologically acceptable alternatives are developed through the Coordinating Committee effort.

In conclusion, we take our responsibility seriously to protect and conserve the Nation's threatened and endangered species under the provisions of the Endangered Species Act. We are very optimistic that the dedicated participation and cooperation that is occurring between Federal and State agencies and the water development and conservation communities under this committee effort will result in a workable solution to this issue in the Upper Colorado River Basin.

Our Service's first charge must be, and will be, the conservation of the endangered fish species and their habitat. We believe this can be accomplished while respecting States' water rights systems and interstate water compact requirements.

Thank you, Mr. Chairman, for the opportunity to participate in this panel. We would be glad to answer any questions.

Senator CHAFEE. Thank you, Mr. Buterbaugh. We will obviously have questions for you. My suggestion is we go through the witnesses first.

Next Mr. McDonald.

STATEMENT OF WILLIAM McDONALD, DIRECTOR, COLORADO WATER CONSERVATION BOARD AND VICE CHAIRMAN, WESTERN STATES WATER COUNCIL

Mr. McDONALD. Mr. Chairman, thank you. Members of the committee. I am appearing before you today in two capacities. One is as vice chairman of the Western States Water Council and, second, as director and secretary of the Colorado Water Conservation Board, which is a State agency. With me in the audience is Mr. Craig Bell, executive director of the Western States Water Council.

Separate written statements for both of those organizations have been submitted for the record. I will make one composite oral statement, distinguishing in only a couple of places the differences between the positions of those two agencies.

I might say in starting that the Western States Water Council is an organization of 15 Western States whose membership consists of three gubernatorial appointees from each of the 15 member States. For the most part, these people, who serve at the pleasure of their Governor, are cabinet members or the heads of the water agencies in the Western States.

The first obvious question to ask of us is why are so many Western States so concerned about issues surrounding the administration of the Endangered Species Act? There are two primary reasons. First of all, there are 60 listed fish species that have been determined endangered or threatened by the Fish and Wildlife Service. Over half of those 60 species occur in one or more of the 15 States which are members of the Western States Water Council. A dozen more are proposed for listing that are in the States of, as I

recall, Arizona, Nevada and California. Potentially, we could be dealing with as many as 40 or 45 endangered fish species in the river systems of the western United States.

Second, Federal agency action triggers, under section 7(a)(2), the consultation process with which you are well acquainted, I am sure, such Federal agency action is nearly always triggered in the Western States either because of the very large amount of Federal land ownership, which puts one into the position of dealing with a variety of Federal laws controlling land use and access to Federal lands, or, second, through section 404 of the Clean Water Act, in which case the Corps of Engineers precipitates the consultation process with the Endangered Species Act.

I would emphasize, however, that we do not view this as just a western problem. I view it, rather, as a latent national problem that will emerge in the years ahead if attention is not given to the manner in which conflicts between administration of the act and water development can be resolved.

I say that because listed endangered fishes are now located in at least 10, if not more, States outside of the west. Birds and plants are listed as endangered or threatened through any number of States outside of the West. And it would appear to me that through section 404 of the Clean Water Act, which applies nationwide, any activity that depletes any river anywhere in the United States of America is subject to the consultation procedures under section 7(a)(2).

In short, we in the West perhaps have raised the issue first, but I think the issues that we are raising will potentially affect water development nationwide.

Why is there an issue? I think Mr. Buterbaugh has touched on some of the high points in the context of the activity in the West. Suffice it to say that with increasing frequency the U.S. Fish and Wildlife Service has edged up to the position that any depletion of a stream, no matter how small, and even though within a State's interstate compact entitlement or decree of the U.S. Supreme Court, that any depletion will necessarily jeopardize the continued existence of the species, that being the standard of section 7(a)(2).

Several problems identified in the Colorado Water Conservation Board testimony arise from a focus on instream flows as the only and exclusive reasonable and prudent alternative under section 7(a). Those problems are: One, there has not been, at least in some instances we feel, a sound scientific basis for those determinations, although we hope that is a problem being resolved right now.

Second, in the face of uncertainty about a sound scientific basis, the burden of that uncertainty has been placed entirely upon the applicant. In other words, the Service has been taking the position that if it doesn't know, it will simply assume without any facts whatsoever that jeopardy will result, and they have proceeded accordingly.

Third, in some instances the suggested flows in the form of reservoir releases from specific projects have been so great as to render a project potentially unfeasible.

Fourth, it would seem to us that in some cases proposed reservoir releases for in stream flows were not in fact reasonably calculated to achieve the objective of the act, which is to conserve the species.

Releases that are to pass a State line and go 265 miles downstream past 40 or 50 headgates are not necessarily the means by which a species, the whooping crane in this example, are best protected.

Finally, we are, of course, concerned that there is a failure to recognize interstate compacts and vested property rights under State law. In short, we are not confident that reasonable and prudent alternatives, as that phrase is used in the statute, have been defined.

There are a number of other problems identified in both statements that I will not detail concerning the exercise of jurisdiction under section 7(a).

Finally, some concerns are expressed in both the council's statement and the board's statement that the affirmative obligation placed on the Secretary of Interior under section 4(f), which pertains to recovery plans, has not been distinguished from the lesser standard required of a project proponent under section 7(a)(2).

Senator CHAFFEE. Your time is up.

Mr. McDONALD. I would simply conclude by saying, as Mr. Buterbaugh has pointed out, that working group efforts to seek administrative solutions are under way. The objective of those is to seek to avoid the conflicts. We think they can be avoided. We are optimistic about those. We think, however, it would behoove Congress to have only a 2-year authorization so we might revisit the success of those efforts Mr. Buterbaugh has spoken to.

Senator CHAFFEE. Thank you very much.

Mr. Hobbs?

STATEMENT OF GREGORY HOBBS, JR., COLORADO WATER CONGRESS

Mr. HOBBS. Senator Chafee and members of the committee, I am Greg Hobbs. I am a specialist in water and environmental law, practicing in Colorado and other places in the Rocky Mountain west. I am here speaking for the Colorado Water Congress, which is an umbrella group of Colorado water user organizations, municipalities, conservancy districts, irrigation districts, counties, and others whose public duties include the development and management of water resources within the State of Colorado to serve Colorado's growing population.

With me today is Mr. Tom Pitts, a consulting engineer who works with our Water Congress project on endangered species; Mr. Bob Thomason, president of the Colorado Water Congress; and Mr. Jack Ross, chairman of the Upper Colorado River Compact Commission. Should there be questions that those gentlemen might answer, they are available.

We are working with the water resources and conservation groups that are interested in Utah, Wyoming, Colorado, and Nebraska and committed to this process of trying to find long-term recovery measures which can be implemented for the whooping crane habitat in central Nebraska and the native Colorado fishes in the Upper Colorado River Basin.

The reason that water user groups are committed to this process is that we are extremely frustrated with the case-by-case, project-by-project examination under section 7 of specific projects which

deplete water from the river sometimes way upstream of endangered species habitat.

Now my client, the Municipal Subdistrict of the Northern Colorado Water Conservancy District, was in fact the sponsor of the Windy Gap project. I know that process well because I sat at the table, among others, with representatives of Senator Hart's office and Senator Armstrong's office in 1981 to try to come to some accommodation between a perceived water conflict in the Upper Colorado River Basin and the native fishes. The case in point was the Windy Gap project which was being developed for six cities in northern Colorado.

A transmountain diversion was proposed from the upper headwaters of the Colorado River through the Colorado Big Thompson system and the Continental Divide to Colorado's front range. Our problem was that the project would deplete 54,000 acre-feet of water a year on an annual average from the stream.

It was found, 150 miles downstream in the habitat of the humpback chub and the squawfish, that the depletion wouldn't make a difference. We modeled the river on a worst case basis by superimposing the depletions, as if they were made in the vicinity of the habitat 150 miles downstream and found that in a 40-foot deep channel, 2 inches of the top surface of the water would be depleted. On that basis, the Fish and Wildlife Service concluded that there would be no jeopardy to the survival of the species.

But the Service had a further point, that looking at the cumulative impacts in the Upper Basin, it could not be said that with further depletions the efforts at recovery would be available and would be enhanced; rather, that recovery would be adversely affected.

On that basis and on that basis alone, on recovery measures and funding, the Windy Gap Project sponsors, six cities of northern Colorado, put \$550,000 into specified efforts to do habitat work and further research into the needs of the endangered fishes.

I have included with the written testimony of the Water Congress the Windy Gap opinion which on page 8 specifically shows that the money was earmarked to conservation and recovery measures of an identified sort. This was done at a time when, arguably, there were not funds from the Federal Government available to do conservation and recovery.

What we have had under the Windy Gap process is individual municipalities in Colorado funding habitat work and further field research into the conservation and recovery of the native fishes.

Now, we recognize this is an interim solution. Our municipalities were not very happy with paying this money. They believe that the Endangered Species Act is a national goal and should be funded particularly through section 5, through the acquisition of land and water and expenditures for recovery plans under section 4. No matter what, they went ahead and did it. We have had valuable work being done that is now assisting the working group in the Colorado River to define further efforts.

Similarly, in the central Nebraska whooping crane problem, we have learned from the work of the Whooping Crane Trust, using the money from the Grayrocks settlement of Basin Electric, a project on the Laramie River, a tributary to the North Platte and

thus, the mainstem Platte in central Nebraska. I visited this habitat 2 weeks ago. They use this incredible machine that can clear out trees that are in a diameter of anywhere up to 8 inches and shred the trees, recreate the open meadows and open fields the crane liked to feed in during the day. Larger trees they take out by a logging operation. They do the same thing with the sandbars in the river.

Thus, the trust has shown that, by mechanical means, it is possible to clear the channel. No amount of water coming downstream can clear out cottonwoods that are 8 to 16 inches in diameter. It just can't be done. The old theory was we could scrub the channel clear of the vegetation by water coming from upstream. I think, Senator, it has been shown we can use mechanical means. We can stock the fish in the Colorado River to a size where they can compete with the bass and other predators that cause a problem. We have solutions if we will just sit at the table and work through them.

We support a 2-year reauthorization and pledge ourselves to work on this effort to find solutions to potential water/endangered species conflicts on an administrative level.

Senator CHAFEE. Thank you very much, Mr. Hobbs.
Mr. Martin.

**STATEMENT OF JAMES MARTIN, STAFF ATTORNEY,
ENVIRONMENTAL DEFENSE FUND**

Mr. MARTIN. Good morning, Mr. Chairman and members of the subcommittee. I am Jim Martin. I am a staff attorney with the Environmental Defense Fund, Rocky Mountain office in Boulder, CO.

I am testifying this morning on behalf of the Environmental Defense Fund and also on behalf of the southwest regional office of the Sierra Club, the Colorado Trout Unlimited, Colorado Office of Friends of the Earth, Colorado Audubon Council, and the Utah Audubon Society. Each of the groups I have the honor to represent this morning focus on issues affecting the intermountain west environment. Each of us has as a principal program goal the protection of the unique and fragile ecosystems of the Upper Colorado River system.

Recently, over the last several years, we have dedicated substantial resources to preventing the extinction of three endangered fish species of the Colorado River system. We have submitted jointly a written statement that outlines in some detail our views on this problem and how we should go about addressing it.

Two principles emerge most clearly in that statement. First, we are confident that the Endangered Species Act provides the tools for preserving the species and for restoring them to healthy populations. No substantive amendments are needed.

However, the Fish and Wildlife Service has, in our view, failed to implement the act's provisions. The Service has, in a few words, failed to do the job of preserving these unique fish species native to the Colorado River. In fact, the Fish and Wildlife Service approach has been marked more by dramatic shifts in policy than by dramatic efforts to save these three species.

We have outlined in our written statement the Service's policy for dealing with consultation on the Colorado River. Essentially it comes down to this: The Service concedes, as it must, that preservation of these species depends upon protection of essential habitat and maintenance of minimum instream flows and water quality. The Service also concedes it does not yet have the data that is required in many cases to gauge the impacts of additional water depletions on these species' survival.

But the Service admits that each additional depletion further limits the system's flexibility to preserve and perpetuate these three endangered fish species.

Given that set of facts, the service has few choices but to issue jeopardy opinions for water resource projects until it gathers the data needed to assess these projects' individual and cumulative impacts on the endangered fish species on the Colorado River system. That is the approach the Fish and Wildlife Service took until March 1981.

Since then the service has, however, pursued the policy of the Windy Gap approach that permits those projects to proceed, even though it does not have the data to measure the project's impacts and even though these species are continuing to decline.

We have been told informally that the Fish and Wildlife Service has abandoned the Windy Gap approach. We are encouraged by that development. We think if the Service faithfully implements the act, it must implement jeopardy opinions at least until a conservation plan is in place.

That brings me to my second point. We believe the change in direction offered by the Service provides a real opportunity. It opens the door for all the affected interests, State and Federal agencies, water developers, and conservation organizations, to sit down and fashion a Comprehensive Conservation Program. Such a program is needed in order to understand how this complex river system works.

That understanding will permit us and the service to do two things. First, we will be able to measure the impacts and the effects of individual and multiple projects. That understanding will foster a realistic and effective recovery plan an addition, such an understanding about how the systems work will permit us to identify where and how further water development can proceed.

We are prepared to work for such a program, and we think such a program can be devised. We are encouraged that others, especially the water development community, have stressed their desire to work together in this approach.

However, we must point out that such a plan must be consistent with the act's emphasis and protection of the ecosystems upon which threatened and endangered species depend and such a plan must be biologically defensible. It must provide protection for sensitive habitat areas and it must provide strong protective action for the flow requirements and the water quality parameters vital to the species survival.

As I said, we have submitted a written statement that details those views in more detail. I appreciate the opportunity to address the panel this morning.

Senator CHAFEE. Thank you very much, Mr. Martin.

Dr. Davison.

**STATEMENT OF ROBERT DAVISON, LEGISLATIVE
REPRESENTATIVE, NATIONAL WILDLIFE FEDERATION**

Dr. DAVISON. Thank you, Mr. Chairman.

My statement is presented on behalf of the National Wildlife Federation and the Colorado Wildlife Federation. It focuses on the protection of threatened and endangered species that depend on natural riverine habitats in the West.

Let's consider first the endangered whooping crane, the piping plover, and interior least tern. These birds rely in part on habitat of the Platte River. This habitat has declined dramatically in this century. During the past 50 years, water development has reduced annual river flows 75 percent and narrowed the critical river channel for the whooper by 90 percent.

In the Colorado River four native fish species are near extinction because of water development. In the Lower Basin at the river all but 4 percent of the water coming from upstream has been appropriated for use. In the Upper Basin, water projects have cut river flows 35 percent. Within 10 years, less than 20 percent of the water available for use will be left.

The cumulative adverse effects of this water development already have been described and I won't go into them further. The status of the Colorado squawfish, humpback chub, and bonytail chub, is convincing evidence of the impact of largely uncontrolled water development.

Now let's look at how water development interests have fared under the Endangered Species Act. Since the act was passed in 1973, no western water project has ever been prevented ultimately from going ahead because of the act. Even the most controversial projects have proceeded. In fact, in 1981 the Fish and Wildlife Service's approach to water depletion projects in the Colorado's Upper Basin became all too reasonable. Prior to 1981, the Service maintained in its biological opinions that "It is important not to reduce present flows until we obtain sufficient biological data that insures any reductions would not be harmful."

Nine of 22 water depletive projects between 1977 and 1980 received jeopardy opinions because of their cumulative adverse effects, including, for example, an annual diversion of 42,000 acre-feet of water by the West Divide project in September 1980. Yet, less than 6 months later the Service decided to allow a larger annual diversion of 57,000 acre-feet of water by the Windy Gap project to proceed while data were gathered on the project's cumulative impacts. The project in fact was constructed before completion of the 3-year study of its impacts.

Since that no-jeopardy opinion on the Windy Gap project, the Service has allowed 32 additional projects to go forward while it conducts further study; that is, every water project in the Upper Basin from 1981 to February of this year.

Quite contrary to Mr. McDonald's comments, none of the Upper Basin water depletive projects considered since 1981 in that basin have received jeopardy opinions. Although the 33 projects given so-called Windy Gap no-jeopardy opinions have depleted, or will de-

plete, more than 400,000 acre-feet of water, none of these opinions have addressed cumulative impacts other than to seek funds for research. These funds do not have to be made available until the depletions actually occur.

So although 33 Windy Gap type projects have been cleared for construction, only about \$800,000 of a promised \$3.5 million has actually been available to fund studies on the cumulative effects of water depletion.

This funding approach prevented the Service from collecting the biological information it needed to assure against harmful effects from each additional project which requested consultation. The way the Service handled the past 33 projects in Colorado's Upper Basin also now prevents adequate evaluation of 27 more projects for which consultations are pending or anticipated in the near future. These projects cumulatively will deplete approximately 200,000 additional acre-feet of water each year.

While the Service informed us 2 weeks ago they will abandon the Windy Gap approach on these 27 projects, it does appear they intend to provide them all with no-jeopardy opinions. The Service apparently is counting on being able to get flows of the proper timing, magnitude and temperature for the fishes from changes in the operation of existing and future Bureau of Reclamation projects.

The Service gave approval to the first 33 projects on the basis that further study would be conducted on those projects' impacts, but those studies by and large have not been done, and with the most recent change in the Service's position, we question whether they will ever be done. Yet the Service appears poised to let 27 more projects go forward without knowing what the impacts were of the first 33.

In our opinion, the Service should not issue any more no-jeopardy opinions for water depletive projects in the Colorado's Upper Basin until it can provide what it said was needed in 1980; that is, the biological information to insure that future reductions will not be harmful to the fishes. Nor should non-Bureau of Reclamation projects be absolved from providing needed flows until the Service has secured from the Bureau of Reclamation with certainty the water releases needed by the fishes.

Finally, we believe the Service should not issue any more no-jeopardy opinions particularly for large depletions until the Upper Colorado River Coordinating Committee has developed a comprehensive conservation plan for the fishes. We believe the Service already has foreclosed many alternatives by issuing at least 15 Windy Gap no-jeopardy opinions for water depletions while the Coordinating Committee has been deliberating. Issuance of additional opinions for the Upper Basin while the Coordinating Committee is doing its work would further compromise the process.

Thank you.

Senator CHAFEE. Thank you, Dr. Davison.

Do you have any changes you recommend in the act itself, Dr. Davison?

Dr. DAVISON. We have detailed some changes on other issues in our more lengthy statement. With regard to the western water issues, we have not recommended any amendments. We don't be-

lieve any changes are needed. We believe that the Fish and Wildlife Service needs to, and hopefully now will, implement the act as it is written.

Senator CHAFEE. Mr. McDonald, I will start with you. It seemed to me that you were seeing problems out there that may arise, but I couldn't see from your testimony that you specifically chose any single project that has, for example, been deterred from its construction or proceeding under this act. You say problems might arise, but I didn't note that you delineated any specific problems.

Mr. McDONALD. I did not state, because it is not the fact that any particular project has been stopped. That is a function of the fact that in the interim the Windy Gap approach has been applied.

I think the perception I am responding to, the problem I am responding to, that Mr. Buterbaugh spoke to, is that in the summer of 1983, in the form of a document characterized as a Draft Conservation Plan, the Fish and Wildlife Service clearly intended to start down the path of taking a position that no further depletions would be acceptable, period. It was out of that draft document, circulated informally for comment, representing a first cut of a potential position of the Fish and Wildlife Service, that the Upper Colorado River Basin working group has grown.

I think that is a very real problem. I think Mr. Buterbaugh would confirm for the record that it was that potential position of the Fish and Wildlife Service that has really ignited this effort to find an administrative solution.

Senator CHAFEE. Here is my problem. This act has been on the books now for 12 years, so it isn't some new act. It has been there. It seems to me the contention before this body, from this panel, isn't that the act shouldn't be reauthorized, but for how long. Your testimony and that of Mr. Hobbs is 2 years. But I can't see that you are pointing out problems with the act.

For example, can either of you tell me whether any water project has been prevented from ultimately going ahead because of the act?

Mr. HOBBS. Mr. Chairman, if I could address that. Having been involved in this negotiation from one side, I don't agree at all with Dr. Davison about what the Fish and Wildlife Service has done. They have been very hard-nosed. It was clear to my clients, the cities of northern Colorado, that if they didn't fund identified conservation recovery measures, their project wouldn't go forward. The Wildcat Reservoir Project on the Platte River was halted for 5 years and the famous Riverside case litigated over whether or not water requirements for that project could actually be delivered into central Nebraska and would make any difference in the whooping crane habitat.

So let's be clear the projects have gone forward, but only—

Senator CHAFEE. We only have a certain amount of time. What I am trying to get at is the answer to this question. Has any water project been prevented from ultimately going ahead because of the act? Yes or no.

Mr. HOBBS. No; **Mr. Chairman;** if the project sponsors agreed with the conditions of the Fish and Wildlife Service.

Senator CHAFEE. Mr. McDonald, what would you say to that?

Mr. McDONALD. I already said no.

Senator CHAFEE. The Windy Gap approach, are you for it or against it?

Mr. McDONALD. Are you speaking to Mr. Buterbaugh or me?

Senator CHAFEE. You.

Mr. McDonald. We feel it has been an appropriate approach in the interim while the Fish and Wildlife Service is trying to gather the data base which will sustain a reasonable scientific judgment as to how to proceed. We anticipate, as Mr. Buterbaugh has officially taken the position, that the Windy Gap approach will be phased out. We hope it will be phased out and would expect it to be phased out as a function of these ongoing work groups.

But it can be phased out, Mr. Chairman, with success only if the work groups come to grips with the issues of how we can conserve the species.

Senator CHAFEE. What do you say, Mr. Hobbs? Are you for it?

Mr. HOBBS. Yes; we are, Mr. Chairman.

Senator CHAFEE. You are for the Windy Gap?

Mr. HOBBS. Yes; we are. But we are also dedicated to see if we can have a mix of Federal-State project funding which can put into effect long-term plans to take the onus off these project-by-project problems which water people get into when proposing a project. We agree, we need an overall plan.

Senator CHAFEE. How about you, Mr. Martin?

Mr. MARTIN. Apparently Mr. Hobbs and I share at least a long-range goal, which is a development of a comprehensive development plan which will develop what we need to recover these species and will also identify what and where water projects can proceed.

But in the interim, the Windy Gap approach is not either halting the decline in these species nor permitting their recovery. It is permitting the Fish and Wildlife Service to conduct further studies, but it is not leading to implementation of any effective measures to restore these species.

Senator CHAFEE. Dr. Davison.

Dr. DAVISON. We are very strongly opposed to it. Let me give you an idea of what happened in 1980, for instance. The Fish and Wildlife Service issued a jeopardy opinion on the West Divide Project, a 42,000 acre-foot diversion, after looking at the cumulative impacts of water development projects in the Upper Basin, including the Colorado Big Thompson project and making the determination that the cumulative impact from West Divide would jeopardize the fish species. Less than 6 months later the Service took a completely different approach on the Windy Gap project.

The Windy Gap project was part of the Colorado Big Thompson Project; yet, the biological opinion for the project did not consider its cumulative impacts, did not consider the Colorado Big Thompson project specifically in the opinion, and did not consider impacts of previous Colorado River Storage Projects specifically in the opinion. Consequently, we are left wondering what happened in that 6-month period. Was there more water, more fish? Why the flip-flop?

The Service has repeated that mistake 32 more times, allowing projects to go forward while they conducted studies, when prior to 1981 they said, "no further net depletions until we know the effect of those depletions."

Senator CHAFFEE. My time is up. Senator Symms.

Senator SYMMS. Thank you, Mr. Chairman.

I thank all of you for being here this morning.

Mr. Buterbaugh, one question that I want to ask is are there any other methods, other than the provision of the instream flows, that your agency or State agency could use to protect a threatened fish species that you are aware of?

Mr. BUTERBAUGH. Yes, Senator, there are. There are a number of nonflow alternatives that are being considered, fish ladders, for example, possibly for the squawfish, which has a strong tendency to migrate.

Senator SYMMS. Is this squawfish the traditional trash squawfish?

Mr. BUTERBAUGH. No, sir. It is a different species than the one you are familiar with in your State.

Senator SYMMS. Is it a valuable fish?

Mr. BUTERBAUGH. It was historically valuable mainly as a commercial fish in Colorado to some extent for the early pioneers. I think it is valuable in the sense that if the species is not protected, it will become extinct.

Senator SYMMS. Is this the bonytail or what is it? That is, is it a similar type fish?

Mr. BUTERBAUGH. It is a different species, a smaller fish, with different habitat requirements, but found in the same general areas of the river.

Senator SYMMS. Are there other ways to protect it, other than the way you just mentioned?

Mr. BUTERBAUGH. Yes. To mention one, fish ladders would possibly be required. Or we might screen water intakes in the irrigation canals, for example. A third way may be, in some cases, to augment the populations with hatchery production. Techniques are available for all three species.

Senator SYMMS. Is there any objection to using hatchery fish to perpetuate this?

Mr. BUTERBAUGH. None whatsoever, so long as it is not used to replace habitat. I mean you can't just have a hatchery situation and keep putting the fish in one little stretch of the river.

Senator SYMMS. Do you know of any conservation group that intends to sue the Federal Government to stop the use of the so-called Windy Gap approach to solving these conflicts?

Mr. BUTERBAUGH. I am unaware of any at this time.

Senator SYMMS. Do any of you have any intention to sue the Federal Government on this issue?

Mr. MARTIN. We have certainly given no thoughts to that.

Dr. DAVISON. No, not at this time.

Senator SYMMS. No intention to at the present time?

Mr. MARTIN. Right.

Senator SYMMS. Mr. Chairman, I know this meeting is primarily about the water questions, but if I could just take 1 minute and ask Galen one other question.

I, along with Senator Simpson and others, have expressed a great deal of concern about the rising population of bears that conflict with the people population in the Yellowstone Park area and also their impact on the livestock industry. In your opinion, is the law

so specific on the grizzly bear in Wyoming and the regional area that grizzly bears are becoming extinct, but the ones in Alaska, which is also part of the United States, that doesn't count? How is that interpreted?

I can't for the life of me understand how we allow 200, 300 bears to interfere with the use of Yellowstone Park by 2 million people. That is my question. We are not running out of bears in the North American Continent. There are thousands of them in Alaska and Canada.

Mr. BUTERBAUGH. First of all, Senator, I don't believe we are preventing the use of Yellowstone Park by 2 million people. There are very few closures, if that is what you are referring to, in the park as a result of bears. Something like less than 2 percent of park users in the Yellowstone Park area were affected at anyone time last summer. So there is very little control, in that sense, of the people in the park.

There is a lot of information given out to the public and most of it is self-policing. The public should be aware of what they are getting into if they get into certain areas. But there is very little restriction on the public in Yellowstone Park because of the grizzly bear.

I would say that is, in general, the case in most areas where we do have the grizzly bear. We are working hard with the Forest Service, other Federal agencies and the States to come up with things that do not halt development but which still protect the bear. I think we are moving along rapidly in that regard.

It is a very visible species. We have far more help than we generally need from all over the world in managing bears. It is just a very political issue. There is a lot of misinformation about it. But we do have a mechanism now with the interagency grizzly Bear Committee where the States and Federal agencies are cooperating and working together on research and other activities. I think we are well on the road to resolving many problems. But it is always going to be a very visible species to be working with.

Senator SYMMS. Thank you, Mr. Chairman.

Senator CHAFEE. Thank you, Senator Symms.

Senator Baucus.

Senator BAUCUS. Thank you, Mr. Chairman.

Mr. Buterbaugh, I would like to follow up on the same subject Senator Symms raised, starting first more specifically and then proceeding to more general topics. More specifically, can you tell me what we have to do so that the Fish and Wildlife Service can provide section 6 moneys to the State of Montana for its bear program?

Mr. BUTERBAUGH. The State of Montana would have to change their State law that allows private citizens to kill grizzly bears preying on livestock.

Senator BAUCUS. Is there anything in the Federal law which so requires? Is there any Federal law which requires the State to change its law, or is that a matter of discretion of the Service?

Mr. BUTERBAUGH. That is a legal question. I would have to refer that to our solicitor. But that is the recommendation we have been given. In order for the State to use section 6 funding for grizzly

bears, that would be the requirement. It is a legal question, interpreting the act and the State law.

Senator BAUCUS. Is Dr. Davison here?

Dr. DAVISON. Yes.

Senator BAUCUS. Would you answer that, please?

Dr. DAVISON. Yes, Senator Baucus.

I don't know the answer to the legal question about whether the Service currently can provide those section 6 funds under the Act. We certainly would support the provision of section 6 funds to Montana for use with the grizzly bear. If legislative changes are needed to do that, we would support such changes.

Senator BAUCUS. I don't have the precise documentation here, but there is a February memorandum which says that although we can find nothing under the Endangered Species Act, it would automatically preclude such funding as a matter of State law. Then it goes on with a lot of gobbledegook.

It seems to me the Service's opinion is that it does not want to. But there is nothing in the Federal law, according to a memorandum to the Associate Director of the Fish and Wildlife Service from the Solicitor. It seems to me based on that memorandum it is more of a matter of policy within the Service rather than a matter of dictate according to Federal law.

What I would like to do, Mr. Buterbaugh, we can't at this moment, but work with you and the State of Montana some way to get those moneys released.

More generally, Senator Symms mentioned the obvious tension that occurs between the act, that is to protect and hopefully recover endangered species, and on the other hand we get a species like the grizzly which can harm people and livestock. Not all endangered species have that kind of tension. So the basic question is how to resolve it.

I am wondering if you are aware of the proposed or potential threatened suit by Defenders of Wildlife against the State of Montana because the State proposes a grizzly bear hunt. The State of Montana is proposing that hunt basically to manage the bear in Montana because we have a lot of bear in the State compared to the number of people we have and also due to livestock losses that occur because of the bear.

I am wondering what advice you have as to how to resolve that difference between those in the State, the Fish and Game Department in Montana, who want to manage the bear for legitimate reasons, and on the other hand those like Defenders of Wildlife who want to prevent the State from managing the bear. How do we resolve that?

Mr. BUTERBAUGH. Senator, first of all, this is coming to a head now because of a court decision in Minnesota dealing with the timber wolf.

Senator BAUCUS. That is correct.

Mr. BUTERBAUGH. In effect, the court decision says you must exhaust all means of relieving population pressures before you can resort to a sport take, whether trapping or hunting. This has a direct bearing on the State of Montana.

If the State of Montana has the evidence that all other mechanisms have been used and there is no other alternative, then I

think we would support hunting as the last resort. But I am not sure everyone agrees at this point in time. We have not seen all the evidence. The State is just compiling all evidence they have on the grizzly bear status. Until we see that and have a chance to review it, I am not sure we are in a position to say.

Senator BAUCUS. Under the Minnesota decision, what does the State have to show?

Mr. BUTERBAUGH. That all mechanisms have been used to relieve excess population pressures.

Say that you have a certain ecosystem that the animal lives in and there are sufficient numbers and they are overpopulating and you have tried every other method to relieve the situation, and if that all fails, then you could resort to a sport take with some kind of controls. That is very difficult to prove. I think the Endangered Species Act, at least for threatened species, should have the mechanism for a sport take of species. The harvest should occur only under certain very rigidly controlled provisions, where you can clearly show the populations have reached surplus numbers.

Senator BAUCUS. I know my time is up. Just one quick question, Mr. Chairman. We may need an amendment to the act here to help clear this up. We also may need to have some kind of extensive hearing perhaps in Montana. You mentioned yourself that everybody under the sun wants to give you advice because it is such a controversial issue. And it is. I know it is very controversial.

The trouble is you get people on both sides of the issue saying there is insufficient data. You have the Defenders of Wildlife who feel there is insufficient data. You get people in the timber industry out there who deal with the bear who feel there is insufficient data. Nobody trusts the data.

At some point we are going to have to have trustworthy data so we know what we are doing here. I suggest, Mr. Chairman, that perhaps we need a hearing someplace in the field, perhaps some potential amendments we can discuss, because it seems to me that a good point can be made for an agreement between a state and the Service to figure out some way for a State to manage wildlife within its borders. Each State is in a different situation. The State of Montana is much different than some other States because of the large population of bear and because of the low number of people who are in conflict with the bear, and also because of the livestock losses as well.

Senator SYMMS. Would you yield for a question? I don't think it has been addressed here. Mr. Buterbaugh said 2 percent of the park, I think. Is that the information you have? I have had people telling me that a sixth of the park was closed.

Senator BAUCUS. I don't know. I can't answer that question.

Senator SYMMS. You said 2 percent?

Mr. BUTERBAUGH. Two percent of park users was the figure I recall.

Senator SYMMS. Could you check that for me?

Mr. BUTERBAUGH. Certainly.

Senator SYMMS. It could be misinformation, I don't know. Maybe it is the 2 percent that is an important 2 percent. I have heard from a lot of people about it. I have had several inquiries to my

office about it, although most of the park is in Wyoming and a part in Idaho.

Senator CHAFEE. Your people may be wanting to go into the 2 percent area. That made it 100 percent of the area they are interested in.

Senator SYMMS. That is correct.

Senator CHAFEE. Why don't you check on that statistic and get it back to Senator Symms, if you could, Mr. Buterbaugh.

Mr. BUTERBAUGH. I certainly will.

Senator CHAFEE. I want to get a couple of questions, if I might, on the record here. Gentlemen, we will have to move along here. This is directed to Mr. Hobbs. Isn't reliance on hatcheries and other artificial devices inconsistent with the goal of the act to preserve the ecosystems?

Mr. HOBBS. Mr. Chairman, we have been looking at that. Let's start from the foundation in the Upper Colorado River that we owe 7.5 million acre-feet a year to the Lower Basin. That guarantees a basin stream flow, perennial stream flow, in the Upper Basin. We think, with this stream flow and some augmentation from reservoir releases combined with it, providing the habitat water they need, combined with getting the fish large enough to compete with the bass that prey on them. A bass predation study was done last year by the Fish and Wildlife Service. Within 72 hours, thousands of young squawfish were eaten by the bass, completely decimated.

Mr. Buterbaugh has said the hatchery is probably necessary in this program. We agree that these fish can be grown to a size large enough to compete with the bass and other sports fishes that have been introduced by the State and Federal game system and then they can compete in the water that we deliver anyway downstream to the Lower Basin. That is why we are so hopeful we can reach a successful outcome using modern techniques of conservation.

Senator CHAFEE. The purposes of the act, however, Mr. Buterbaugh, as you outlined them, and I understood them from you, are to preserve the ecosystem.

Mr. BUTERBAUGH. Correct.

Senator CHAFEE. Are the coordinating committees looking at State law as well as the Endangered Species Act in considering whether State law may need to be changed to accommodate the competing interests? I will ask that of Mr. McDonald. Are the co-ordinating committees looking at State law as well as the Endangered Species Act in considering whether State law might have to be changed to accommodate the competing interests?

Mr. McDONALD. I think the candid answer is that we simply haven't gotten to the point in the process where we have inquired of either the Endangered Species Act or State law whether sufficient means are available or not. I guess I would expect that to be a natural outgrowth of the process, although it has not yet been explicit.

Senator CHAFEE. Thank you very much, gentlemen.

Do you have any other questions?

Senator BAUCUS. No.

Senator SYMMS. Go ahead and change panels. I will make a comment while they are changing.

Senator CHAFEE. Senator Symms will make a comment while changing panels. Thank you all very much for coming.

We will now get to the next panel, and if you would start from the left as you face us, Mr. Patrick O'Brien from Chevron USA representing the American Petroleum Institute; Mr. Dan Murphy, National Woolgrowers Association; Mr. Michael Bean, chairman of the Wildlife Program, Environmental Defense Fund; Mr. Wes Hayden, International Association of Fish and Wildlife Agencies; and Mr. Lonnie Williamson, secretary, Wildlife Management Institute.

Senator SYMMS. Mr. Chairman, I just want to comment on the point that was made about the bass eating the squawfishes and my personal philosophical thinking about what we are doing.

I respect the Chair's earlier comments about the importance of setting an example of our concern about some of these endangered species, but if you can have a better bass fishery to replace it, it just seems to me it makes more sense to have a bass fishery than it does to have some endangered species of the squawfish. I doubt if you could get rid of all the squawfish if you tried anyway.

That is my problem with the thing. I wish there was some way we could have a little moderation on this, I will say again, in the management of it. I don't mind having it on the books, but in the application, they could bend a little bit.

We are spending a lot of good money and a lot of time fighting over this. I am not convinced these fish are of that much value to our future is what my point is. It may be, a good bass fishery might be better. Maybe somebody can convince me otherwise some day, but that is my whole reservation about this.

Senator CHAFEE. Thank you very much.

Let's proceed now. Each of you gentlemen will have 5 minutes. We will have to restrict you to that. Mr. O'Brien.

STATEMENT OF PATRICK O'BRIEN, SENIOR ENVIRONMENTAL SPECIALIST, CHEVRON USA, REPRESENTING THE AMERICAN PETROLEUM INSTITUTE

Mr. O'BRIEN. Mr. Chairman, members of the subcommittee, I am Dr. Patrick O'Brien, senior environmental specialist on the corporate environmental safety, fire, and health staff of Chevron USA in San Francisco.

I am very pleased for the opportunity to speak to you about reauthorization of the Endangered Species Act on behalf of the American Petroleum Institute. Part of my responsibilities for Chevron are to assist our operating organizations around the country to assure their activities are in compliance with the Endangered Species Act. I have been involved with the act through experience with a diversity of projects where endangered species have been issues of concern.

To begin, and I want to emphasize, that API supports reauthorization of the Endangered Species Act. We want to operate in a compatible manner with the goals and protective standards of the act while working with the administrative process to provide certainty and predictability in the planning process and to avoid costly delays.

In this vein, API has submitted a written statement for the record that points out the need for clarification on several points as well as a variety of administrative changes that would enable the act to work more efficiently. These adjustments are consistent with maintaining necessary standards of protection for listed species.

I want to focus on several of these concerns in my testimony. Briefly these are implementation of recovery plans, the role of the project proponent in the consultation process, and incidental taking permits under section 10(a).

In addition to its protective standards and procedures for listing species, the Endangered Species Act also provides for programs to aid their recovery. It is in everyone's interest—industry, regulatory agencies, the environmental community, and above all the affected species—to carry out positive measures that lead species along the path to recovery and ultimate delisting.

Although progress in taking the first step—publication of approved recovery plans—has recently been made, greater efforts are required to implement the management plans that they elaborate.

Recovery plans should be adopted within some reasonable schedule that is set at the time species are newly listed. In addition, the interested public should also be able to participate in the development of recovery plans.

Several member companies report that during section 7 consultations, actual meetings to scope out issues among action agencies, project applicants, and consulting agencies often don't occur until a jeopardy finding is reached and it becomes necessary to negotiate about reasonable and prudent alternatives.

Policies carried out by certain action agencys exclude project applicants because section 7 consultations are viewed as privileged communications among the agencies involved—that is, we will let you know when you have a problem—are counterproductive. At the very least, project applicants should be able to review draft biological opinions to determine if suggested mitigation measures can be factored into project planning. They may also possess or have access to data that would improve the agencies' ability to render decisions based on the "best scientific and commercial information available."

Another way to involve project applicants is through early consultations provided for in the 1982 amendments. However, proposed regulations published in the Federal Register in June 1983 are discouraging for project applicants who wish to seek this process.

In particular, proposed requirements for an applicant to demonstrate that a project is administratively, technically, economically, and legally feasible are unworkable. These criteria are often impossible to determine until environmental and other preliminary review are complete, contradicting the very purpose of early consultations.

Our experience is that certain action agencies have actually refused to consider early consultations. API proposes that it should be incumbent on the action agency to initiate early consultation if the project applicant shows two things: (a) that there is a definite project proposal which outlines possible effects, and (b) the pro-

posed action will likely occur after necessary approvals are secured.

The 1982 amendments to the Endangered Species Act set up two distinct processes for dealing with the issue of incidental taking depending on whether a Federal action is involved.

Projects undergoing section 7 review can obtain a waiver of the section 9 taking prohibitions if they comply with reasonable and prudent measures specified by the Secretary.

For projects that don't trigger section 7, section 10(a) authorizes the Secretary to issue an incidental taking permit. To obtain an incidental taking permit, the applicant must submit a conservation plan. Modeled on the historic *San Bruno Mountain* case, the Section 10(a) provisions are burdensome, cumbersome, and inappropriate for many types of projects.

In practice, they have also been interpreted to mean that a conservation plan must provide for the overall habitat management needs of listed, proposed, and candidate species on a regional scale.

This certainly exceeds the effort required to comply with reasonable and prudent measures under section 7 which theoretically are designed to accomplish the same thing; namely, mitigate the effects of incidental taking caused by the project.

The SBM prototype provides no incentives for a project applicant who voluntarily wishes to comply with the Endangered Species Act. A more streamlined, geographically constrained process is needed to enable incidental taking permits to be issued for small, uncontroversial projects involving single landowners. The protective standard should be analogous to those reasonable and prudent measures required by section 7, for comparable projects subject to a Federal action.

These permits should be based on conservation plans that address geographical units appropriate to the nature, size, and duration of the project and the magnitude of its effects on protected species.

This concludes my remarks. I would be happy to answer any questions.

Senator CHAFEE. Thank you very much, Mr. O'Brien.

Mr. Murphy?

STATEMENT OF DAN MURPHY, NATIONAL WOOLGROWERS ASSOCIATION

Mr. MURPHY. Thank you, Mr. Chairman. I am Daniel Murphy, director of governmental affairs for the National Woolgrowers Association. We represent the U.S. sheep industry.

I am here today to submit the testimony of Mr. Joe Helle, a sheep rancher in Dillon, MT. He is chairman of the National Woolgrowers Association, which is one of the most important of our committees. We lose \$75,000 to \$100,000 a year to predators.

Mr. Helle wanted to present his own testimony here today, but it is nearing lambing time in Montana. Plus there is a grizzly bear loose on Mr. Helle's land which is also anticipating lambing time. Mr. Helle earned his chairmanship through personal experience. In addition to coyote predation, which plagues the entire industry,

Mr. Helle is besieged by grizzly bears and possibly in the near future gray wolves.

He supports the concept of the Endangered Species Act and says so in the testimony. What he does not support is the growth of the act geographically to the point the ranchman loses his rights and opportunities.

I would like to cite two examples from Mr. Helle's testimony.

Last summer a grizzly bear attacked my sheep, not once but three different times. The law prevented me from protecting my flock because the grizzly is a threatened species. I abided by the rules and notified the authorities. Eventually the bear was tranquilized.

Much to my dismay, the authorities turned it loose, right in the proximity of my sheep. Again it threatened my herd, and this time it was caught, fitted with a radio collar and transported nearly 100 miles away. A few days later it returned. Right now we don't know where it is, and I must go through another summer worried about my sheep, my herder and my family members who work on the ranch and service these sheep camps.

Mr. Helle has lost 70 sheep so far at \$7,000. The bear has still not been taken.

Let me cite you another incident. Richard Christy, another Montana sheep rancher, had a similar experience. After repeated attacks on his sheep, the bear emerged one evening from the timber and advanced on Mr. Christy and the herder. Fearing for his life, and exasperated with the destruction of his private property, Dick Christy shot the bear. He was cited before an administrative law judge and fined \$2,500.

Not only was he out the money and sheep that were killed, he had to give up the lease upon which he was grazing and sell his sheep. His investment was ruined, his reputation soiled and his ranch operation terribly disrupted.

Mr. Christy has appealed his conviction, and perhaps it is time we determined whether a law enacted and subsequently interpreted through regulation then superceded the constitutional right of an individual to protect his property. I am convinced that the Endangered Species Act was never intended to force people into committing criminal behavior.

Under the authority of the Endangered Species Act, there are plans currently under way to propagate a free roaming population of wolves in the Yellowstone Park area. Civilization has eliminated much of the ecological niche for the wolf, and only if the wolf is given priority above all other species, include man, can this plan hope to succeed. And then what will we have? We will have spent hundreds of thousands of taxpayer dollars to try and force a square peg in a round hole. We will have trammelled on traditional and existing rights of property owners, recreational users and stock growers within and adjacent to the core propagation area. And finally, and critical to our concerns, we will have created a reservoir of predators that will disperse into the surrounding socioeconomic community because of the wolf's territorial nature. Given the recent Eighth Circuit Court's ruling on Minnesota timber wolves, we will have a predator that can't be legally destroyed. Would we give a safecracker immunity from prosecution simply because there are not as many safecrackers as there are other types of criminals?

Mr. Chairman, we would request that the committee continue to be mindful that there is a class of predators that is endangered or threatened. These animals tend not to be good citizens or respectful of other peoples' property. We hope that laws or rules can be developed which will provide protection from these endangered predators. As special as they be to our Nation and its heritage, their rights should not be permitted to exceed the rights of the individuals.

Thank you very much.

Senator CHAFEE. Thank you very much, Mr. Murphy.

Mr. Bean?

STATEMENT OF MICHAEL BEAN, CHAIRMAN, WILDLIFE PROGRAM, ENVIRONMENTAL DEFENSE FUND

Mr. BEAN. Thank you, Chairman Chafee. It is a pleasure to be here before you on behalf of the 11 organizations identified in my written statement. I would like to summarize that statement.

In the 12 years since this act was passed, we have learned that the road to extinction can be reversed. There are a number of examples of which you are aware. The brown pelican within the last year was taken off the endangered species list because of its recovery. The peregrine falcon, once eliminated from the eastern United States, has now been successfully reintroduced in that part of the country. The whooping crane is making a slow recovery. The bald eagle, our Nation's symbol, while still endangered, is nevertheless making a strong recovery.

But for some species it is already too late. Indeed, Mr. Chairman, in the 3 short years since I last sat before you, at the last reauthorization hearing, we have identified in our testimony at least seven species that are believed to have gone extinct. These seven species represent approximately the same number as are believed to have been lost in the seven centuries that preceded the 20th century. Six of those seven species never made it onto our endangered species list. They were so-called candidate species, species the Fish and Wildlife Service knew to be in trouble, intended to list some day, but never got around to listing before they were gone.

These were thus not unknown and undescribed species in some remote tropical rain forest in some foreign country. They were species known to us from within our own borders. Nor were these hopeless cases. Indeed, they were species that could have been saved without heroic measures and without extraordinary expense.

They might well have been saved if only the Secretary of the Interior had had an effective means of monitoring what is happening to the candidate species that he has identified for future listing. He doesn't. These six species are clear evidence of that.

We have proposed a means whereby the Secretary can more effectively monitor what is happening to the candidate species. It isn't complex. It isn't costly. It is not likely to be very controversial. It doesn't even require changing agency behavior, at least in a few agencies, because some are already doing this.

What we are proposing is to require that Federal agencies confer, pursuant to section 7(a)(4), with the Secretary of the Interior about actions that may significantly adversely affect candidate species. As you know, such a requirement currently applies to species that have been proposed to be listed but are not yet listed. We would propose to expand that to encompass the candidate species as well.

I think the record of extinction in the last 3 years demonstrates that a measure of this sort is necessary.

I want to say a bit more about candidates in a minute, but I want to turn to another subject where strengthening of this act is necessary as well. That concerns protection for plants.

There are many private landowners, not just The Nature Conservancy and similar conservation groups, but ordinary individual private landowners, who are pleased to cooperate in efforts to conserve plants that occur on their lands. The problem is the Endan-

gered Species Act does very little to back up those private landowners who want to help in the conservation of plants on their lands.

This is because the Endangered Species Act does not prohibit the taking of endangered plants by collectors, whether they be commercial or noncommercial collectors or vandals, on anything but Federal lands. Thus, the private landowners have as their only recourse, if they are interested in protecting their plants, reliance on State trespass laws, which are in most cases completely ineffective and without any significant penalty.

So we have proposed an amendment that would prohibit the taking of plants on non-Federal lands except with the consent of the landowner. That is an amendment that will aid the efforts of cooperating landowners. It will help in the conservation of endangered plants and it won't interfere at all with the rights of private landowners. Indeed, to the contrary, it reinforces those private landowner rights.

To conclude, it is necessary to say something about the resources that are truly necessary to make this act work effectively and make its objectives truly attainable. I mentioned the six candidates and the one listed species that have gone extinct in the last 3 years. There is a much larger number of candidate species that although not yet extinct, have seriously declined in the short time since they were identified as candidate species. There are also many examples of already listed species that have also declined since since they were first listed.

I am sure when we reappear before this committee again at the next reauthorization cycle, whether that be 2 years as Mr. Wallop would propose, or 5 years as you proposed, the list of species that we have lost from within our very own national borders will be even longer unless we substantially increase the resources that are available to this program.

To give you an idea of the shortage of resources, completing action on the so-called category I candidate species, the species that the Fish and Wildlife Service says it knows now are eligible to be proposed for listing, is going to take a quarter century at current listing rates. Yet, clearly the examples given in my testimony indicate that many of those species, perhaps most, don't have a quarter century to wait.

A similar problem exists with respect to the matter of State funding: Mr. Baucus asked a previous witness about Montana's efforts to restore Federal funding for its grizzly bear work. The amount of funding in the aggregate under section 6 for all States is the same today as it was in 1977 when the cooperative section 6 program began. Yet there are approximately four times as many cooperative agreements in effect today as there were in 1977.

As a result, when you take into account inflation and the growth in the number of States with cooperative agreements, you find that the per State share of funding under section 6 is less than 20 percent today of what it was in 1977 when this program began. This shortfull is even more serious in light of the fact that there are also more species listed today than there were in 1977.

With your permission, Mr. Chairman, I would like to conclude with a brief remark directed to Mr. Symms who in his comments a

moment ago indicated a need to be persuaded that this whole effort was really worthwhile.

I want to bring to your attention, Mr. Symms, that a species with a funny-sounding name, the rosy periwinkle, happens to be the source of a drug called Vincristine. When you and I were children, before Vincristine had been discovered, had either of us contracted childhood leukemia, the chance that the disease would have been fatal for us was 80 percent. Today, because of the drug Vincristine from the rosy periwinkle, the chance of survival is 80 percent for a child, your child or mine, that contracts that disease.

The rosy periwinkle is but one of numerous examples of seemingly obscure and unimportant creatures that are later found to have enormous importance for medicine, science, agriculture, and so on. If we casually disregard these species before discoveries of that sort can be made, we risk losing important advances in all of those fields for ourselves and for future generations. That I think lies at the heart of this effort to protect all endangered species, not just the familiar, the lovable, the well-known, but all endangered species.

Thank you very much, sir.

Senator CHAFEE. Thank you very much.

Mr. Hayden?

STATEMENT OF WES HAYDEN, INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE AGENCIES

Mr. HAYDEN. Thank you, Mr. Chairman.

I want to stress at the outset that the International Association of Fish and Wildlife Agencies has always been a strong supporter of the Endangered Species Act since the time of its original enactment in 1973. We have supported the amendments that have been made up to this point. We believe the changes that were made in 1982 materially improved the effectiveness of the legislation as a way of ensuring the survival and well-being of endangered plants and animals that otherwise might not have survived.

Senator CHAFEE. Nice to have you back, Mr. Hayden.

Mr. HAYDEN. Thank you, sir. I would say, too, that we fully support the outline of the reauthorization bill that you have before you for consideration today, S. 725. We feel that the 5-year authorization is a reasonable and practical step, and that it is very much preferable to reauthorization every 2 or 3 years. If there are amendments that have to be made, we believe that they can be made during the period of authorization, at the appropriate time, and under the appropriate set of circumstances, without going through the entire costly and time-consuming process of total reauthorization.

We also strongly support the financing that you have provided under S. 725 with additional money for section 6, up to \$10 million in the outyears. The money authorized and the time of authorization provided for are a very badly needed basis for long-range planning. That is essential if the act is going to operate successfully over a long period.

Mr. Bean mentioned the fact of State involvement in the endangered species program. It is interesting to note that there are now

42 States and three territories that have cooperative agreements with the Fish and Wildlife Service for this program. They are able, I think, to succeed under the limited financing that is now available primarily because 26 of those States are among the 32 which are also operating some sort of tax checkoff program. That gives them the opportunity of using tax checkoff money along with the section 6 money to take care of their endangered species activities.

We see the prospect for added advances under the bill we now have before us, but we have to say that we are concerned about some recent developments on the court front which have what we regard as serious implications for the program. I refer, first of all, to the decision in the *Dion* case by the Eighth Circuit Court of Appeals in January of this year. The court ruled that Indians had the right to kill endangered species at will on reservations, the only restriction being that they couldn't sell parts from the trophies.

That decision, I understand, may be appealed to the Supreme Court by the Fish and Wildlife Service. In the meantime, it has the effect of saying that under that court interpretation, treaty rights take precedence over any objective of the Endangered Species Act.

Then there is the question of the Minnesota wolf case where the court came to almost the totally opposite conclusion. Not only did they recognize the sanctity of the endangered species, but they also held in that case that even threatened species could be taken only under the most extraordinary circumstances. That sharply restricts discretionary authority of the Secretary of the Interior, which has been in effect since the Endangered Species Act was first enacted in 1973.

Beyond the wolf situation in Minnesota, that decision has serious implications for the long-term preservation of the grizzly bear in Montana, where hunting of the species is now conducted on a limited basis as part of the State's management strategy. The result of those efforts, up to this point unchallenged, had been that Montana has the only prospering grizzly population in the lower 48 States.

Aside from the immediate impact of the court action, there are also prospects for long-range damage which could follow under these decisions. The decision in the Minnesota case misconstrues the provisions for differing levels of protection afforded endangered and threatened species and in the process ignores an administrative understanding of that section of the act which has prevailed since 1973.

Unless reversed, we are seriously concerned that the effect of this decision could spread to other impacted areas, seriously impairing the future effectiveness of the Endangered Species Program.

We urge very strongly this be given full consideration and that an amendment to deal with the problem be enacted. Thank you, Mr. Chairman.

Senator CHAFEE. Thank you very much, Mr. Hayden.

Mr. Lonnie Williamson. We welcome you back.

STATEMENT OF LONNIE WILLIAMSON, SECRETARY, WILDLIFE MANAGEMENT INSTITUTE

Mr. WILLIAMSON. Thank you, Mr. Chairman.

Of course, we strongly endorse the reauthorization of the Endangered Species Act. We agree very strongly with your longer-range authorization than has been suggested by some others.

Just a couple of things we would like to point out. It has already been said here, but with regard to the Minnesota wolf case, we would like to see the subcommittee take a look at whether or not that decision by the court would unduly restrict the Secretary of the Interior and the State wildlife agencies from making certain professional determinations that would be in the benefit of threatened species, not only with regard to the wolf but in other places. This, of course, could apply to the grizzly bear in Montana and perhaps elsewhere.

Also, with regard to the *Dion* decision that states the Indians may kill endangered species and any other wildlife on reservation lands, we think this is completely incompatible with the purposes of the Endangered Species Act and we would hope the subcommittee would take a close look at that to see if legislation would be required to prevent any kind of happening such as the death of those 200 bald eagles for which the *Dion* case arose.

Thank you, Mr. Chairman.

Senator CHAFEE. Thank you, Mr. Williamson.

I must say I was stunned at that decision. I remember seeing, I believe those were the photos that were displayed in the newspapers, were they not, of these bald eagles laid out on the ground? Hundreds of them; well, scores of them. It is our understanding there were up to 200. Somehow to say that Indian reservations are exempt from the Endangered Species Act was extraordinary.

All right, fine. Thank you very much.

A couple of questions. Mr. Murphy, you read that statement from Mr. Helle. Just out of curiosity, when his sheep were attacked, do you know whether they were on Federal lands or private lands?

Mr. MURPHY. Federally leased lands. Classification situation five, I believe. The bear could be there as long as he didn't cause a problem. If he is causing a problem, he is supposed to go.

Senator CHAFEE. Specifically, Mr. Bean, your complaint with the act is inadequate funding, is that it?

Mr. BEAN. That is certainly a basic complaint. I also identified two substantive amendments: Plants and the candidate species conferral.

Senator CHAFEE. As you know, for the first time in 1982 we got into the plant business. We did something. We said you could take them off Federal lands. Yours would extend that a little further.

Mr. BEAN. It would extend that a little further, although not in a way that would interfere with private landowner rights at all. It would reinforce those.

Senator CHAFEE. Mr. O'Brien, is there any particular thought you want to leave with us?

Mr. O'BRIEN. Yes. I think that we are in a position on the section 10(a) process where industry has operations, the petroleum industry I am speaking of, has operations in areas where there has been historic activity—

Senator CHAFEE. There has been what activity?

Mr. O'BRIEN. Historic, long-term involvement of petroleum operations. That kind of activity has taken place in areas that have not been subject to the heightened public awareness and scrutiny of the *San Bruno Mountain* case.

We feel that it is quite appropriate that it should be possible for individual project proponents to obtain incidental taking permits for actions of a very local nature. These activities shouldn't have to get folded into an overall regionally scoped habitat conservation plan, that results in the issuance of an incidental taking permit for multiple landowners, for a diversity of projects.

It should be clarified that the incidental taking permit process is something that can work on much simpler, less complicated, less controversial circumstances than *San Bruno Mountain*. The way it is being applied, at least in our experience so far, is that there is a reluctance on the part of consulting agencies to consider simplifying that process.

Senator CHAFEE. Senator Baucus?

Senator BAUCUS. No questions, Mr. Chairman, except to say to Dan, I appreciate your statement and say hello to Joe Helle for me, please. I think in some respect we will be able to resolve some of these questions later on this year. I have spoken with the chairman of the subcommittee. We are now trying to work out a date for having a hearing on the tension between the act on the one hand and stock losses, protection of property rights, on the other. We may be looking toward an amendment, if that seems appropriate. At least we have to resolve this in some way.

I think the hearing will go a long way to separate the wheat from the chaff in all of this. Thank you.

Senator CHAFEE. Thank you very much, gentlemen, for coming. We will resume at 9:30 on Thursday.

[Whereupon, at 12:44 p.m., the subcommittee was recessed, to reconvene at 9:30 a.m. on Thursday, April 18, 1985.]

[Statements submitted for the record and the bill, S. 725 follow:]

TESTIMONY OF HONORABLE MALCOLM WALLOP,
SENATOR FROM WYOMING

TO THE SENATE SUBCOMMITTEE ON THE ENVIRONMENT
REGARDING REAUTHORIZATION
OF THE ENDANGERED SPECIES ACT

Mr. Chairman and Members of the Subcommittee:

For some time now two great legal systems which govern water resources in this country have been precariously balanced in relation to one another. On the one hand, we have state water allocation systems upon which agriculture, industry, and municipalities have long relied in determining the quantities of water which they may use now and in the future.

On the other hand we have a number of interrelated Federal laws which serve the beneficial goals of protecting water quality, wetlands, and fish and wildlife. The Endangered Species Act is an important part of our effort to preserve our national heritage. The survival of mankind is connected to the survival of plant, animal, and bird life.

In the past two decades this Congress, reflecting the sentiment of the nation, has acted strongly and effectively to balance our human needs with the protection of our natural environment, in recognition that our national heritage includes our seas, prairies, canyons, mountains, skies, and the life that shares this environment with us.

To sustain this life, we have made, and are making, great efforts to keep our waters clean, for example, through the Clean Water Act, the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response Compensation and Liability

Act. The states are actively involved in this joint effort to keep our waters free of pollutants which interfere with the beneficial use of our water resources.

Beneficial use of water is a concept and a reality which westerners understand. In the states located beyond the hundredth meridian, water has always been the lifeblood of economic health and physical wellbeing. In recent years, our sister states of the midwest, the east, and the south have begun to share a growing concern over the availability of reliable water supplies to sustain our farms, factories, and family life. This concern has spawned a number of potential conflicts and economic impacts which point out the necessity of marshalling our available water resources to meet the nation's present and future needs. You may recall an October, 1983 article of U.S. News & World Report on the water crisis of the Eighties. I have included a copy with this testimony.

Since passage of the Mining Act of 1866, Congress has fostered the economic vitality of the nation by actively encouraging state governments to allocate and manage the water resources within their boundaries. Interstate compacts and equitable apportionment decrees of the United States Supreme Court allocate water quantities between states, so that the needs of one state do not prevent the exclusion of another state's needs in the same river system.

Congress Should Continue to Pursue Two Great National Goals:
Environmental Protection, Including Preservation of Endangered
Species, and the Use of Water Under the Water Allocation Systems
of the States.

As we consider reauthorizing the Endangered Species Act, we must strive to maintain in harmony, to the greatest extent possible, two great national goals: environmental protection, including preservation of endangered species, and use of water under the water allocation and management systems of the states. My concern is that misapplication of the environmental laws, in particular the Endangered Species Act, could prevent the beneficial use of water along entire river systems. I have attached to my testimony resolutions of the State Legislatures of Utah, Nebraska, Wyoming and Colorado setting forth their fears that the Act might be misapplied to prevent water use, which is so necessary to the present and the future of these States and the Nation.

My own state of Wyoming is located high on the Colorado and Platte River systems. Some persons argue that additional water use from the tributaries and the mainstream of the Colorado River may interfere with the survival and recovery of the native Colorado River fishes, the humpback chub, the Colorado River squawfish, and the bony-tail chub. On the Platte River and its tributaries it is said that additional water use may adversely affect the whooping crane habitat. The fears of the State Legislatures, which led to the resolutions I have attached, were based on jeopardy opinions and tentative recovery plans for the Platte and Colorado River basins. These tentative draft recovery plans were not based on sound scientific evidence and the use of

modern resource management techniques. Rather, flow depletion was simplistically seen to be an evil which must be halted.

The problem is that the waters of Colorado and the Platte have been apportioned among the states by interstate compacts and equitable apportionment decrees, including the Colorado River Compact, the Upper Colorado River Compact, the South Platte Compact, and the equitable apportionment decrees of the United States Supreme Court in Wyoming v. Colorado and Nebraska v. Wyoming. The economic vitality and wellbeing of the states of the Colorado River and Platte Basin depend upon our continued ability to make use of the waters to which each state is entitled under its water rights system, compact entitlements, and equitable apportionment decrees.

Last year I worked with Senator Chaffee and other colleagues of ours, as well as interested state and federal agencies, to help establish a state/federal cooperative effort to identify measures which could be taken in the Colorado River and Platte River basins to meet the goals of the Endangered Species Act, while fully maintaining the water allocation and management systems of the states. We adopted in the Senate, an appropriations authorization to start this process on the Colorado River.

I am pleased that Secretary Clark, and now Secretary Hodel, have directed and encouraged the Fish and Wildlife Service and the Bureau of Reclamation to work with the states of Wyoming, Utah, and Colorado, on the Colorado River effort, and the states of Wyoming, Colorado, and Nebraska on the Platte River effort.

Concerned water and environmental groups have been asked to participate and are participating.

To date, the discussions and analysis resulting from these work groups promise hope that an acceptable resolution can be reached in both basins. To understand the States' concern about the Endangered Species Act, and the breakthrough which was achieved by establishment of the working groups, some background is informative.

The Platte River Problem and Possible Resolution

In 1978 the Fish and Wildlife Service designated nearly 60 miles of the Platte River in central Nebraska as critical habitat for the endangered whooping crane. 50 C.F.R. § 17.95. Soon thereafter, the whooping crane and its designated habitat became an issue in the environmental impact statement for the Grayrocks Project of Basin Electric Power Cooperative on the Laramie River, a North Platte tributary near Wheatland, Wyoming. Basin Electric is a rural electric cooperative serving consumers in a multi-state area including Wyoming, the Dakotas, and Nebraska. Following Grayrocks, the Fish and Wildlife Service issued jeopardy opinions for the Wildcat Project of Riverside Irrigation District and Public Service Company of Colorado and the Narrows Project of the Bureau of Reclamation and the Lower South Platte Water Conservancy District, both in the South Platte basin within Colorado.

It was thought that water from the North and South Platte rivers, and their tributaries, was needed in Central Nebraska on the Platte mainstream to "scrub out" woody undergrowth along the

river in the whooping crane habitat. Crane roost on shallow, submerged sandbars in the river and avoid areas of brush and trees, where there exists the danger of concealed predators.

The Grayrocks case was settled, following a federal district court opinion, Nebraska v. REA, 12 ERC 1556 (D. Neb. 1978), with payment by Basin Electric of seven and one-half million dollars (\$7,500,000.00) for establishment of the Platte River Whooping Crane Habitat Maintenance Trust.

The Whooping Crane Trust in Nebraska is demonstrating on the Platte River that huge "flushing flows" are not necessary to scrub out woody undergrowth in the whooping crane habitat. Work in and along the River by the Trust has demonstrated that the shallow, submerged sandbars, open fields, and wet meadows, which crane use for roosting and feeding, can be cleared and maintained by mechanical methods, using equipment which cuts down the trees and brush. The Trust has acquired 6,000 acres of land, in fee and easements, along the Platte River within the designated whooping crane habitat. Approximately 550,000 sandhill crane use this stretch of the Platte River as a staging area during March and April to gain weight and strength for their migration to Canada and Alaska. They feed on waste corn, snails, and worms during the day in farmers' fields and wet meadows along the river. At night, the crane roost in the river. Though few have been sighted in the designated habitat, whooping crane have basically the same feeding and roosting habits as sandhill crane.

Ironically, in light of past thinking, high flows can actually be a problem, rather than a benefit, since crane cannot

stand in water any deeper than 8 inches. The high runoff which occurred in the Platte Basin in 1983 and 1984 caused the loss of roosting sites in the designated habitat. The wet meadows in the area are due to a very high groundwater table, and to rainfall which is more plentiful in this area of Nebraska, east of the hundredth meridian.

Thus, on the basis of actual field work, it appears that continued water development in the Platte Basin will not interfere with maintenance the whooping crane habitat. Conflict between the Endangered Species Act, on the one hand, and state and interstate water allocation systems, on the other, can be avoided with the use of good management techniques.

The Colorado River Problem and Possible Resolution.

In the Colorado River Basin during the latter part of the 1970's, the Fish and Wildlife Service issued jeopardy opinions to a number of Bureau of Reclamation water projects, including Dallas Creek, Dolores, and West Divide in Colorado and Upalco in Utah, on the grounds that dams cause water temperature and flow changes which are detrimental to the native fishes.

However, it has been realized more recently that there are other factors which affect populations of the native fishes. These other factors include past commercial harvesting of the squawfish, sport fish stocking and habitat programs, eradication efforts of the Federal and State governments designed to poison "rough" fish in favor of establishing game fisheries, and predation by warm water game fish, such as bass, pike and catfish.

Predation studies by the Fish and Wildlife Service demonstrate that young squawfish are decimated by bass. But squawfish can be grown in hatcheries and stocked both in number and in size, so that they can compete with game fish. Backwater areas, such as manmade gravel pits, can be utilized as native fish spawning habitat.

Under the 1922 Colorado River Compact, ratified by Congress, 42 Stat. 171, the States of the Upper Colorado River Basin must deliver an annual average of seven million five hundred thousand (7,500,000) acre feet of water to the Lower Basin on a ten year running average. This amounts to at least one-half of the Basin's annual average water yield measured at Lee Ferry below Lake Powell. Since half the Basin's water yield must be delivered downstream, there will always be water available in the Upper Basin for the native fishes as a necessary by-product of the "Law of the River." It appears that hatchery rearing and stocking programs, and other management techniques, can be utilized to conserve and recover the Colorado River native fishes, while the Upper Basin states continue to develop their compact entitlements under the 1948 Upper Colorado River Compact, 63 Stat. 31.

Presently, water project proponents in the Upper Basin are paying a share of conservation and recovery measures for the native fishes, under the "Windy Gap approach," whereby water project sponsors contribute to Fish and Wildlife Service programs for the fishes. These funds are being utilized for habitat work and field work designed for use in conservation and recovery of the fishes in concert with project development.

I want to stress that water project sponsors believe that programs for conservation and recovery of endangered species should have federal funding assistance. The Windy Gap approach has its critics from both a water user and a conservationist standpoint. But at least, for the interim, project sponsors are making significant financial contributions to work for the benefit of the native fishes of the Colorado River. The Cheyenne Stage II Project in my own State of Wyoming, a much needed project for municipal water supply, proceeded under this approach. We expect the Cheyenne Stage III Project to proceed also in the near future.

Congress Has Supported and Should Continue to Support All Reasonable Efforts to Avoid Conflict Between the Endangered Species Act and the Water Allocation Systems of the States.

In 1982 Congress, through the efforts of Senator Simpson and many of our colleagues, added section 2(c)(2) to the Endangered Species Act, which provides that:

It is further declared to be the policy of Congress that the federal agencies should cooperate with state and local agencies to resolve water resources issues in concert with the conservation of endangered species.

Echoing this theme, Professor Tarlock said in a recent article that:

Section 101(g) of the Clean Water Act and the cooperation injunction in the Endangered Species Act reflect the principle that intergration should take place by the least intrusive means available to the federal agency. For instance, flow maintenance that potentially conflicts with a state allocation pattern should be a preservation strategy of last resort.

Tarlock, "Riverside Irrigation District: A New Pelton Dam?",
XX Land and Water Law Review, 20, 29 (1985).

Like the Endangered Species Act, state and interstate water laws and court rulings on water allocation define important national and state goals and objectives which should be respected.

In Riverside v. Andrews, ____ F.2d ____ (10th Cir., No. 83-2114, announced March 26, 1985), the Court, while discussing section 101(g) of the Clean Water Act and the Corps of Engineers' authority under section 404 of the same Act to review environmental impacts of dams, said that:

"[A] fair reading of the statute as a whole makes it clear that, where both the state's interest in allocating water and the federal government's interest in protecting the environment are implicated, Congress intended an accommodation."

It then seems fundamental that management alternatives which do not involve conflicts with state and interstate water allocation systems should have the first priority. Such measures can include mechanical brush clearing, habitat rehabilitation along streams and side channels, fish ladders, artificial propagation, stocking, and a whole host of management techniques which are utilized in our game programs and should also be used in the endangered species program. Section 3(3) of the Endangered Species Act currently authorizes the use of any or all of these techniques in conservation of an endangered species.

Where water flows are needed in addition, the United States should proceed under the present section 5 of the

Endangered Species Act to obtain water by purchase, appropriation, condemnation, or donation. In this way, a water right can be obtained which is capable of administration under the system of compacts, equitable apportionment decrees, and water rights administration of the states. Water needs for endangered species can thereby be reconciled with the state water systems and administered within those systems.

We need to look at the possibility on the Platte River that the solution is a mechanical brush clearing program, perhaps in combination with a storage project in the vicinity of the whooping crane, in order to regulate flows optimally for the crane habitat. We do not need to reach hundreds of miles upstream to stop or curtail the use of water which has been allocated under law and which may not be capable of delivery anyway, because of conveyance losses and pumping of tributary or alluvial groundwater.

So, too, on the Colorado River. Careful examination must be given to management alternatives that are compatible with additional water use. If truly needed, water rights can be obtained by the federal government for the purpose of preserving endangered species. If someone else's water right must be used, in part or totally, for this purpose, just compensation should be paid.

The Endangered Species Act is a national goal, and conservation and recovery plans should be undertaken and funded in accordance with its important priority as a national objective.

Congress Should Reauthorize the Endangered Species Act for a Period of Two Years.

Further scientific research and good resource management techniques are showing that potential conflicts between water laws and the Endangered Species Act can be avoided, provided that the overall goal is directed towards meeting both the Endangered Species Act and the "Law of the River." The reports from the Platte River and Colorado River working groups are expected in 1986. I am hopeful.

It is expected that both groups will recommend measures and funding necessary for maintenance of the whooping crane habitat in the Platte and the native fishes in the Colorado River, consistent with interstate water compacts, equitable apportionment decrees, and the other laws which govern the use of water in those river basins. This will be a true test of the workability of the Endangered Species Act in vast river systems, such as the Platte and Colorado River basins, which are governed by complex systems of law and policy which affect and determine use of water.

I urge the Committee to reauthorize the Endangered Species for a period of two years, so that we can then determine what additional authority, if any, is needed to implement the reports of these working groups. Their effort embodies the goal we set forth in section 2(c)(2) of the Act. We should recognize this.

I urge the Committee to approve the working group process in report language and to similarly approve the Windy Gap approach, which serves a useful and needed role in helping to

fund conservation and recovery measures in the interim, while long-term recovery measures and funding mechanisms are identified and implemented. Though I am troubled that individual municipalities and irrigation districts are being called upon to fund recovery measures, which should be funded as a national goal under sections 4 and 5 of the Act, I believe it is accurate to say that, particularly in times of national fiscal constraint, it is far preferable to call upon water project sponsors for assistance than it is to halt or impede water use until funds become available from Congress.

The endangered species/water use problem we address today is not unique to the Colorado and the Platte basins, even though these basins include an immense geographical reach. The Endangered Species list includes nearly 60 endangered or threatened fishes and an additional 12 have recently been proposed for listing. The entire country is potentially affected by administrative decisions regarding the choice of means for conservation and recovery.

If the reauthorization is to be greater than two years, then we must include specific language which prevents the usurpation of state and interstate water allocation systems. This language should also mandate the Fish and Wildlife Service to utilize all available reasonable resource management alternatives which avoid conflict with water allocation and, then, to utilize the authorities of section 5 of the Act, if and when water is needed which will not otherwise be available through operation of the "Law of the

River." These authorities are already contained in the Act, but, if the Fish and Wildlife Service determines not to use them, the Congress should mandate their use.

I have come to believe that there is no necessary and inevitable incompatability between the Endangered Species Act and the water allocation systems of the states. What is needed, however, is an approach which does not depend upon case-by-case regulation of water projects but, rather, relies upon wise management plans for recovery of endangered species, respecting the laws of the United States and the respective states which are affected. This should be carried out as part of a national program, in cooperation with the States and project sponsors.

Thank you very much for receiving my remarks. I pledge to continue to work with this Subcommittee and the full Committee as we in Congress continue to pursue these two great national goals and objectives: environmental protection, including preservation of endangered species, and use of water under the water allocation and management systems of the states.

UTAH RESOLUTION

WATER RIGHTS RESOLUTION

1984

SECOND SPECIAL SESSION

Engrossed Copy

H. C. R. No. 2

By Gayle F. McKeachnie

A CONCURRENT RESOLUTION URGING THE FEDERAL GOVERNMENT TO
ADMINISTER THE CLEAN WATER ACT AND THE ENDANGERED SPECIES
ACT IN A MANNER CONSISTENT WITH STATE WATER LAW.

Be it resolved by the Legislature of the State of Utah, the Governor concurring therein:

WHEREAS, the Army Corps of Engineers and the United States Environmental Protection Agency have interpreted Section 404 of the Clean Water Act in a manner which may effectively limit the amount of water a water right holder may divert from streams;

WHEREAS, Section 101(g) was added to the Clean Water Act in 1977 to prevent decisions under that act from superceding, abrogating, or impairing the water allocation systems of the state and water rights created under state law;

WHEREAS, the United States Fish and Wildlife Service has proposed a plan for the recovery of endangered fish of the Upper Colorado River Basin;

WHEREAS, the effect of that plan could be to limit and restrict the future use of private water rights, to disregard the priority of private water rights approved under state law, and to impose depletion taxes and user fees that are burdensome and unfair;

WHEREAS, Utah has entered into four interstate compacts to provide stability to water matters between the states and to assure long-term dependable supplies;

H. C. R. No. 2

WHEREAS, the United States Congress has ratified these compacts, placing its seal upon the allocation of water between states under these compacts;

WHEREAS, the states have relied on these compacts and laws of the United States in creating rights to the present and future use of water within the boundaries of each state; and

WHEREAS, the use of the Clean Water Act and the use of the Endangered Species Act to obtain water quantities for federal purposes are not proper means to acquire a water right and pose a grave threat to allocation and administration of water by the states.

NOW, THEREFORE, BE IT RESOLVED by the Legislature of the state of Utah, the Governor concurring therein, that the state of Utah urges the federal government to recognize the legitimacy of state water law and its foundation in the doctrine of prior appropriation and that this recognition be reflected in the administration of the Clean Water Act, the Endangered Species Act, the Reclamation Act, and other federal statutes.

BE IT FURTHER RESOLVED that the state of Utah calls upon federal agencies to enter into memoranda of understanding with the state of Utah for the express purpose of administering federal statutes in a manner consistent with state water law.

BE IT FURTHER RESOLVED that copies of this resolution be forwarded to each member of the state's congressional delegation, to the administrator of the U.S. Environmental Protection Agency, to the commander of the Army Corps of Engineers, to the commissioner of the Bureau of Reclamation, and to the Secretary of the Interior.

WYOMING RESOLUTION

ORIGINAL SENATE
JOINT RESOLUTION
NO. 0002

ENROLLED JOINT RESOLUTION NO. 1, SENATE

FORTY-SEVENTH LEGISLATURE OF THE STATE OF WYOMING
1984 BUDGET SESSION

A JOINT RESOLUTION requesting the United States Congress to amend the Clean Water Act and the Endangered Species Act to reestablish state supremacy over water allocation and administration.

WHEREAS, the Army Corps of Engineers and the United States Environmental Protection Agency have claimed that Section 404 of the Clean Water Act allows these federal agencies to determine how much water may be diverted by a water right permittee from streams and rivers in the State of Wyoming;

WHEREAS, Section 101(g) of the Clean Water Act states that the Act shall not supercede, abrogate or impair the water allocation systems and water rights created under state law;

WHEREAS, the purposes of the Clean Water Act, and in particular Section 404, is to reduce pollution from dredge and fill activities;

WHEREAS, the United States Fish and Wildlife Service is developing plans for the recovery of various species of endangered fish and wildlife that do not consider the effects of state water laws, rights and administration;

WHEREAS, the effects of these plans could be to limit and restrict the future use of private water rights, to disregard the priority of private water rights approved under state law and to impose depletion taxes and user fees that are burdensome and unfair;

WHEREAS, The United States Congress has ratified and approved various interstate compacts which apportion the water between Wyoming and other states;

WHEREAS, the states have relied on these compacts and laws of the United States in creating rights to present and future uses of water within the boundaries of Wyoming and the other

ENROLLED JOINT RESOLUTION NO. 1, SENATE
FORTY-SEVENTH LEGISLATURE OF THE STATE OF WYOMING
1984 BUDGET SESSION

signatory states; and

WHEREAS, the use of the Clean Water Act and the Endangered Species Act as implemented by the Corps of Engineers, the Environmental Protection Agency, and the United States Fish and Wildlife Service have in effect denied the State of Wyoming the right to develop its water as set forth in various interstate river compacts.

NOW, THEREFORE, BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF WYOMING, that the Congress of the United States amend the Clean Water Act to clearly provide in Section 404 that no determination by the Corps of Engineers or the Environmental Protection Agency under Section 404 be used to prevent or limit the diversion, storage, or beneficial use of water that is authorized by various interstate river compacts as approved by the signatory states and by the United States Congress;

IT IS FURTHER RESOLVED, that the Congress amend the Endangered Species Act to assure full protection of state water rights and of water allocated or decreed to a state from being diminished or abrogated by conflicts with the Endangered Species Act;

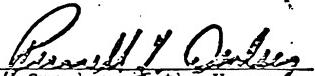
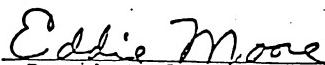
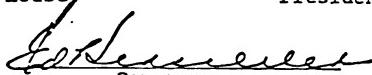
IT IS FURTHER RESOLVED, that Congress is requested to reaffirm the authority and primacy of state law to regulate, administer and allocate the waters of the respective states; and

ENROLLED JOINT RESOLUTION NO. 1, SENATE

FORTY-SEVENTH LEGISLATURE OF THE STATE OF WYOMING
1984 BUDGET SESSION

IT IS FURTHER RESOLVED, that copies of this resolution be transmitted by the Secretary of State to the presiding officers of each House of Congress of the United States and to each Senator and Representative in the Congress of the United States.

(END)


J. R. Dill
Speaker of the House
Eddie Moore
President of the Senate
Ed Schreiber
GovernorTIME APPROVED: 3/8/84DATE APPROVED: 9:38 AM.

LR 46

LR 46

LEGISLATIVE RESOLUTION 46

Introduced by Schmit, 23; Haberman, 44; Lynch, 13;
Beyer, 3; Miller, 37; Vickers, 38;
Rogers, 41; Baack, 47; Eret, 32; Higgins,
9; Pappas, 42; Chronister, 18; Hefner, 19;
Goodrich, 20; Carsten, 2; R. Johnson, 34;
Remmers, 1; DeCamp, 40; Nichol, 48; Lamb,
43; Lundy, 36; Sieck, 24; Chizek, 31;
Peterson, 21; Nelson, 35; Smith, 33;
Barrett, 39; Goll, 16; Morehead, 30;
Harris, 27

WHEREAS, the United States Department of Interior, on May 15, 1978, after abandoning plans to establish a Platte River Refuge, declared a fifty-mile reach of the Platte River in central Nebraska as critical habitat for the endangered whooping crane; and

WHEREAS, such designation by law declares that the designated area is necessary for the survivability of the whooping crane; and

WHEREAS, whooping cranes use the critical habitat area only very rarely and most sightings of whooping cranes in the past four decades have been on reservoirs, lakes, and farm ponds or lagoons in central Nebraska and northern Kansas.

NOW, THEREFORE, BE IT RESOLVED BY THE MEMBERS OF THE EIGHTY-NINTH LEGISLATURE OF NEBRASKA, FIRST SESSION:

1. That the United States Department of Interior is urged to undertake detailed study to determine if the critical habitat area is indeed critical to the

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survivability of the endangered whooping crane and, if it is not, to remove the designation.

Donald J. M. Ginter
PRESIDENT OF THE LEGISLATURE

I, Patrick J. O'Donnell, hereby certify that the foregoing is a true and correct copy of Legislative Resolution 46, which was passed by the Legislature of Nebraska in Eighty-ninth Legislature, First Session, on the thirty-first day of January, 1985.

P.J.O'Donnell

CLERK OF THE LEGISLATURE

1985

COLORADO RESOLUT

SENATE JOINT MEMORIAL NO. 2.

BY SENATORS Bishop, Allard, Beatty, Brandon, Callahan, Durham, Fenton, Glass, McCormick, Meiklejohn, Noble, Ray Powers, Strickland, Wattenberg, Wells, and Winkler; also REPRESENTATIVES Younglund, Artist, Bath, Bledsoe, Brown, Bryan, Carpenter, Entz, Hamlin, Mutzebaugh, Pankey, Paulson, Shoemaker, Swenson, Tebedo, Underwood, and D. Williams.

URGING THAT THE GOVERNMENT OF THE UNITED STATES RESOLVE QUESTIONS REGARDING ENDANGERED SPECIES IN THE PLATTE RIVER BASIN AND THE COLORADO RIVER BASIN IN A MANNER WHICH FULLY RESPECTS INTERSTATE WATER COMPACTS, EQUITABLE APPORTIONMENT DECREES, AND THE WATER RIGHTS SYSTEMS OF THE RESPECTIVE STATES.

WHEREAS, In 1982, the Fifty-third General Assembly of the state of Colorado adopted Senate Joint Memorial No. 1, urging that the Government of the United States refrain from interfering with state water allocation systems, water rights, and compact entitlements through misuse of the federal Endangered Species Act; and

WHEREAS, The Secretary of the Interior has established state-federal work groups for the Colorado River and Platte River basins in order to determine how to meet the terms of the Endangered Species Act while fully maintaining the compact entitlements, equitable apportionment decrees, and water rights sytems of the affected states of Colorado, Wyoming, Utah, and Nebraska; and

WHEREAS, Nonflow alternatives for management of .. endangered or threatened fish and wildlife may alleviate ..

conflict between state water administration and preservation of endangered fish and wildlife in the Colorado and Platte River basins; and

WHEREAS, Nonflow alternatives should be the first priority for management; and

WHEREAS, Preservation of endangered species is a national goal and should be nationally funded; and

WHEREAS, Use of regulatory mechanisms, such as section 404 dredge and fill permits, to require the uncompensated surrender of all or part of a water right as the price for pursuing exercise of that right, is repugnant to the laws of Colorado; and

WHEREAS, There is a legitimate question as to whether the designated whooping crane habitat on the Platte River in central Nebraska is a truly critical habitat for that species; now, therefore,

Be It Resolved by the Senate of the Fifty-fifth General Assembly of the State of Colorado, the House of Representatives concurring herein:

(1) That the exercise of water rights under state water law systems should proceed in the Colorado River and Platte River basins, in accordance with applicable interstate compacts, equitable apportionment decrees, and the water laws of the affected states; and

(2) That the Department of Interior, in administering the Endangered Species Act, should put a first priority on the use of nonflow management alternatives for preservation of endangered or threatened species; and

(3) That where water is required for preservation of endangered or threatened species, based upon sound scientific analysis, such water should be purchased or obtained by the federal government under section 5 of the Endangered Species Act, not through use of section 7 of the Act; and

(4) That the Platte River and Colorado River basins state-federal work groups should proceed expeditiously to spell out a process or plan which will meet the terms of the

Endangered Species Act while fully maintaining the compact entitlements, equitable apportionment entitlements, and water rights in the affected states of Colorado, Wyoming, Utah, and Nebraska; and

(5) That the Department of the Interior should implement a temporary moratorium on additional listings of endangered or threatened species which may adversely impact state water administration pending completion of the process described in subsection (4); and

(6) That the designated critical habitat of the whooping crane in central Nebraska on the Platte River should be examined for delisting, and it should be delisted if it is not absolutely necessary for the survival of the whooping crane; and

(7) That the Endangered Species Act should be amended to require the Fish and Wildlife Service and other federal agencies to place first priority on nonflow management alternatives, when conflicts with state water allocation systems and water rights are otherwise a potential; and such other amendments to the Endangered Species Act should be made as are necessary to preserve to the states their management systems.

Be It Further Resolved, That copies of this Memorial be sent to each member of the Congress from Colorado, to the Senate and House Committees of Reference which must examine reauthorization of the Endangered Species Act, to the Governors and Legislatures of Wyoming, Nebraska, and Utah, to the Secretary of the Interior, the Secretary of the Army, and the Secretary of Agriculture.

Ted L. Strickland
PRESIDENT OF
THE SENATE

Carl B. Bledsoe
SPEAKER OF THE HOUSE
OF REPRESENTATIVES

Marjorie L. Nielson
SECRETARY OF
THE SENATE

Lorraine F. Lombardi
CHIEF CLERK OF THE HOUSE
OF REPRESENTATIVES

STATEMENT OF GALEN L. BUTERBAUGH, REGIONAL DIRECTOR, U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR, BEFORE THE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION, ENVIRONMENT AND PUBLIC WORKS COMMITTEE, U.S. SENATE, ON THE ENDANGERED SPECIES ACT AND WESTERN WATER ISSUES

APRIL 16, 1985

Mr. Chairman and members of the Subcommittee, my name is Galen Buterbaugh. I am Regional Director of the U.S. Fish and Wildlife Service's Denver Region. It is my pleasure to be here today to describe the Service's involvement in the complex issue of the Endangered Species Act and water development in the West, particularly in the Upper Colorado River Basin in Colorado, Utah, and Wyoming. I would like to discuss the background and the present status of activities in the basin, and where we are hopefully headed in the near future.

Construction and operation of water development projects in the Colorado River Basin are associated with the decline in abundance and distribution of three endangered fishes, the Colorado River squawfish, the humpback chub, and the bonytail chub. Major water development in the Upper Basin began with the development of Flaming Gorge Reservoir and other large projects in the early 1960's. By the 1970's, the average flow of the Colorado River was reduced 35 percent (3.9 million acre-feet) in the Upper Basin. These water projects have altered the riverine habitat by reducing spawning and rearing areas and altering river channel characteristics, thereby affecting water temperature, salinity, and turbidity, and obstructing the migration of fish.

The squawfish and humpback chub were listed as endangered in 1967 and the bonytail chub in 1980. The squawfish has been extirpated from 75 percent of its former range and is presently found only in the Upper Basin. Originally, the humpback chub was found over approximately 1,200 miles of river. It now exists in sizable numbers only in Westwater and Ruby (Black Rocks) Canyons in Utah and Colorado and in Grand Canyon near the mouth of the Little Colorado River in Arizona. The distribution of the bonytail chub has been reduced to about 2 percent of its original range and only a few old individuals are found in Lake Mohave in the Lower Basin in the States of Arizona and Nevada.

Section 7 of the Endangered Species Act requires Federal agencies to consult with the Secretary of Interior to insure that agency actions are not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction of their habitat.

Section 7 consultations on water development projects in the Upper Basin first arose in 1977. From 1977 to 1980, the Service issued 14 jeopardy biological opinions with respect to major water development projects in the Upper Basin. Most of these were Bureau of Reclamation (Reclamation) projects. These biological opinions were based on the best but limited biological data available at that time. Because of the scarcity of data, the Service was often unable to provide specific alternatives which could offset project impacts. Many of the reasonable and prudent alternatives given in these opinions indicated that the Bureau of Reclamation should maintain the capability to release water from the subject projects or other

existing Reclamation projects to replace depletions caused by the subject project. Another alternative was that Reclamation should be prepared to further adjust flow releases from these projects in the future when the exact flow and habitat needs for endangered fish were known.

Since it was recognized additional studies would be needed to determine habitat requirements for the endangered fishes, in 1978 Reclamation and the Fish and Wildlife Service (FWS) initiated a 3-year Colorado River Fishery Project (CRFP) study to determine biological requirements including the necessary flows for the "jeopardy" projects and to aid in analyzing these and future projects pursuant to section 7 consultation.

While the CRFP studies were underway, several Federal agencies requested formal section 7 consultation on a number of nongovernment projects that involved Federal actions. These projects caused flow depletions but could not provide water from other sources. While in some cases, the depletion would not occur in the vicinity of the actual habitat of the endangered fishes, the continued cumulative adverse impact from more depletions was nevertheless a critical concern to the Service.

Through consultation on the Windy Gap Project in 1981, an approach was developed (known as the Windy Gap approach) to prevent jeopardy to the listed fishes from this and other projects. This approach was based on four points:

1. Cumulative effects of further water resource development in the Upper Basin would lead to the eventual extinction of the three listed fish unless intensive measures were taken to protect and manage the fish and their habitat.
2. The FWS would develop a comprehensive conservation plan as a guide to managing the endangered fish of the Upper Basin and as a general guide for section 7 consultations.
3. Biological opinions would consider direct project effects as well as indirect effects.
4. Project sponsors could contribute funds to help underwrite the overall costs of the conservation program designed to offset the adverse impacts on the listed fish from further depletions of water. A formula was developed for apportioning costs of conservation measures between projects based on the amount of proposed water depletion by a project as a percentage of the total amount of water available for depletion in the Upper Basin.

The FWS completed 80 consultations on water-related projects in the Upper Basin from 1977 - 1985, including issuance of 33 Windy Gap-type opinions from 1981 - 1985. Those projects that were issued Windy Gap opinions would result in flow depletions of 415,914 acre-feet, including depletions from both the Green and Colorado River drainages. We should point out that in the past funds for offsetting conservation programs were not contributed

until depletion of water from the system. Some depletions may not occur for years or at all, but if all occur, we expect to receive over \$3 million. FWS has actually received approximately \$772,000 thus far and expended all but about \$34,000 for various research projects such as evaluating specific spawning and rearing areas, assessing physical habitat manipulations for the benefit of the endangered fishes, and assessing migration. More recent opinions require some immediate funding for conservation measures to assure the reduction of project impacts on the listed fish.

With the data from the CRFP and other studies, FWS initiated the development of a specific management plan for the conservation and recovery of the three listed fishes in the Upper Basin in May 1982. This plan, as an extension of the species recovery plans, was intended to consolidate potential recovery actions into a comprehensive, coordinated long-range plan to be used by the FWS and other participating Federal and State agencies. The plan was to define the biological status of the fish, delineate habitat requirements, and specify a step-by-step program for the conservation of the fish and their habitat. This program was also to specify research needs, measures for the protection of existing habitat and populations, and describe fishery and habitat enhancement measures. A preliminary draft plan was completed and made available in June 1983 to all participating State and Federal agencies and other interested parties for their review and comments.

The issuance of the preliminary draft plan resulted in considerable controversy, especially from parties involved in water development. They expressed serious concerns over the flow criteria presented in the plan and the effect this criteria would have on established water rights and uses in the Upper Basin. The FWS subsequently withdrew the preliminary draft plan and in concert with the involved Federal, State, public, and private entities, it was agreed that a special Upper Colorado River Basin Coordinating Committee (CRCC) would be established to address this complex issue. The Committee is composed of two Regional Directors from the Bureau of Reclamation, the Regional Director of the Fish and Wildlife Service, Department of Natural Resource Directors from the States of Colorado and Utah, and a representative from the Wyoming Governor's office. Frank Dunkle, U.S. Fish and Wildlife Service, is the Executive Director of the Committee. The committee's goal is to develop a solution to the endangered fish species needs and water use that acknowledges the States' water rights systems and interstate water compacts.

The CRCC set up a steering committee and subcommittees on biology and hydrology that include representatives of both water development and conservation organizations such as the Colorado Water Congress, the National Audubon Society and the Colorado Wildlife Federation. The biology subcommittee was charged with reviewing all of the available technical biological data, identifying the needs of the endangered fish species, and evaluating the use of flow and nonflow alternatives for conserving these endangered species. The hydrology subcommittee was given the charge to describe the historical and present levels of water use and availability

in the basin and then make an effort to predict the amount of water that might be available by the year 2000.

The subcommittees have worked very diligently to assimilate and compile data, identify data gaps, review the availability of water, and determine the type of flow regime that may be required or are important in the overall management of the fish and water resources in the Upper Basin. The subcommittees have been able to identify sensitive habitat areas for important life stages of the endangered fishes such as spawning, nursery areas, and adult concentration areas. The major difficulty has been to determine the flow and temperature requirements of endangered fish at each sensitive area in the basin and to examine these requirements in the context of needs for water development. Several state-of-the-art biological and hydrological modeling techniques are being implemented as a basis for addressing this need. Initial tests indicate that the models hold promise for providing a flexible, scientifically sound approach for defining the instream habitat requirements of the endangered fish, for assessing project impact, and for evaluating various management options for simultaneously conserving the endangered fish and developing water resources.

A variety of management alternatives are also being discussed and evaluated. These include:

- managing the operation of existing reservoirs to provide improved habitat conditions for endangered fish;

- acquiring water rights and storage to ensure the delivery of water at critical times and locations;
- modifying existing and proposed dams and diversion structures to provide for fish passage for migration;
- augmentation of endangered fish populations at specific locations;
- continued research and data collection to allow for a more precise definition of the life requirements of the fish and the reasons for population decline; and
- physical habitat modification.

We are expecting a preliminary draft plan with alternative recommendations by the end of June 1985. By the end of September 1985, we expect to have a detailed draft plan prepared that will address recommended needs, procedures to be followed, monitoring programs needed, and a proposed management scenario for the Upper Basin. Following that, we hope to see an actual management plan developed and implemented for these endangered fish that will also provide for water development in the basin consistent with the States' water rights system and interstate water compacts. We believe this is a task that can be accomplished, but it will require considerable work and cooperation from all CRCC members.

Another subject of some concern has been the Service's issuance of biological opinions while our Coordinating Committee activity is ongoing. Some section 7 consultations were already underway when our main CRCC effort began in March of 1984. In most cases involving larger water depletions, we exhausted our time extensions and were technically responsible for completing the consultations. We have completed 19 formal consultations since March 1984 that involve water depletions in the Upper Colorado River Basin. Of these 19 projects, 10 are ongoing water depletions associated with projects for which the Office of Surface Mining (OSM) is issuing permits. They range in depletions from 4.5 to 110 acre-feet per year. Of the remaining 9 projects, 5 are related to oil shale development and 3 are related to other types of energy development. Depletions from these 9 projects will range from 124 to 73,042 acre-feet and total approximately 135,000 acre feet per year. It may, however, be some time in the future before many of the depletions actually occur. The Service decided to proceed with these projects in the interim utilizing the Windy Gap approach along with required study support and funding from developing entities for other conservation measures such as fish passage facilities. We plan to request time extensions consistent with the provisions of the Act in any future consultations on larger depletions until the CRCC plan is formulated. In addition, the Windy Gap approach will be phased out as biologically acceptable alternatives are developed through the Coordinating Committee effort.

In conclusion, we recognize and respect the mandates of the Endangered Species Act. We take our responsibility seriously to protect and conserve .

the Nation's threatened and endangered fish and wildlife resources under the provisions of this Act. We believe we have diligently and effectively followed the Act's mandates in the conservation of the endangered Colorado River fishes. We have consistently attempted to follow what we believe was the best approach to take for long-term benefit to the endangered fishes. We are very optimistic that the dedicated participation and cooperation occurring between Federal and State agencies and the water development and conservation communities under the CRCC effort will result in a workable solution to this issue in the Upper Colorado River Basin. The Service's first charge must and will be the conservation of the endangered fish species and their habitat. We believe this can be accomplished while respecting States' water rights system and interstate water compact requirements.

Thank you, Mr. Chairman, for the opportunity to participate on this panel. I will be glad to answer any questions on this matter.

TESTIMONY**on****REAUTHORIZATION OF THE ENDANGERED SPECIES ACT****submitted to the****Subcommittee on the Environment****Senate Committee on Environment and Public Works****on April 16, 1985****by the****WESTERN STATES WATER COUNCIL**

Dear Mr. Chairman and Committee Members:

My name is J. William McDonald. I am the Vice-Chairman of the Western States Water Council. The Council is an organization of fifteen western states whose members are appointed by and serve at the pleasure of the western governors. The Council has a vital interest in implementation of the Endangered Species Act and its impact on western states' management of their limited water resources.

Background

In July of 1984, the Department of the Interior released an updated list of endangered and threatened species. The list includes nearly 60 endangered or threatened fishes alone. Over half of these have an historic range covering one or more western states including Arizona, California, Colorado, Nevada, New Mexico, Texas, Utah, and Wyoming. In whole or in part these are arid or semi-arid states where limited water resources are in great demand. Moreover, in the past year alone at least three additional western U.S. fish species have been listed as endangered or threatened (the Yaqui chub, Yaqui catfish and Beautiful shiner in Arizona, New Mexico and Mexico), and another dozen fishes have been proposed for listing:

- (1) the Modoc sucker--California;
- (2) the Owens tui chub--California;
- (3) the desert pupfish--California/Arizona
- (4) the Sonora chub--Arizona
- (5) the Fish Creek Springs tui chub--Nevada;
- (6) the Railroad Valley springfish--Nevada;
- (7) the desert dace--Nevada;
- (8) the Pecos bluntnose shiner--New Mexico;
- (9) the June sucker--Utah;

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- (10) the Warner sucker--Oregon;
- (11) the Foskett speckled dace--Oregon; and
- (12) the Hutton tui chub--Oregon

With respect to the above proposed listings, each notes an existing or potential adverse impact on these species due to the destruction or modification of habitat by such water-related activities as the construction of dams and impoundments, other instream barriers, water diversions and depletion, channelization, siltation, the lining and dredging of irrigation canals, ground water pumping, livestock watering, and water pollution.

As the list of endangered and threatened species lengthens, conflicts with western water-related resource management will increase. For example, proposed listings and listed fishes could affect features of the Central Utah Project, the Central Arizona Project, municipal water supply projects for Cheyenne and the Denver metro area, and other projects which are actually under or moving to construction.

The problem is not limited to the West and Southwest. Other fishes on the endangered species list are found in the States of Arkansas, Oklahoma, Tennessee, Ohio, Alabama, Florida, Georgia, North Carolina, Virginia, and Maryland. Nor is the problem limited to fish. Various species of birds and plants which use riverine habitats have been listed, or proposed for listing, as endangered or threatened species.

1982 Endangered Species Act Amendments

Recognizing the importance of preserving our genetic resources, Congress enacted the Endangered Species Act. However, Congress also recognized the potential conflict between implementation of the Act and essential development and management of other natural resources and established specific consultation and exemption procedures. Despite the 1982 amendments, which greatly improved conflict resolution mechanisms in the Act, problems remain which are a cause of concern to western states' water interests and others.

The Western States Water Council suggested and actively supported many of the 1982 changes to section 7 to streamline the Act's consultation and exemption procedures, eliminate possible delays, and provide for greater participation in the decisionmaking process by non-federal interests. Unfortunately, the Fish and Wildlife Service has yet to promulgate final regulations implementing all these changes.

The Council also had a hand in preparation of subsection 10(d) of S.2309, which the House accepted, adding a new section 2(c)(2) which states that:

It is further declared to be the policy of Congress that federal agencies shall cooperate with state and local agencies to resolve water resource issues in concert with conservation of endangered species.

The accompanying Senate Report explains that the purpose of the amendment is to "recognize the individual state's interest and, very often, the regional interest with respect to water allocation." The report goes on to recognize that "most of the potential conflicts between species conservation and water resources development can be avoided through close cooperation between local, state and federal authorities."¹

However, little has been done to effectively implement the above congressional statement of policy. Conflicts between implementation of the Act and western water resources development and management remain unresolved.

Administrative Resolution of Conflicts

The Western States Water Council supports the resolution of such conflicts through administrative means. The Fish and Wildlife Service should be directed to implement the Congressional policy, as expressed in the 1982 Act, to "cooperate with state and local agencies to resolve water resource issues in concert with conservation of endangered species."² Congressional purpose and policy should be redefined explicitly to state that the conservation of endangered and threatened species is to be achieved in a manner which avoids conflicts with western water resource development and water rights.³

Every effort should be made to mitigate any negative impact on the species through measures which do not inhibit water development and use. Such measures may include habitat modification, artificial propagation (e.g., through hatcheries), appropriate uses of federal reservoirs, reduced planting of competing exotic sport fishes, and other measures which can further the conservation of species without impairing beneficial uses under state law.

¹/ Senate Report 97-418, dated May 26, 1982.

²/ 16 USC Section 1531(c)(2).

³/ WSWC Position statement, Endangered Species Act, July 31, 1981 adopted in Coeur d'Alene, Idaho and Amendment to Section 404 of the Clean Water Act, January 13, 1984, adopted in Phoenix, Arizona.

The Department of the Interior has established two joint working groups comprised of representatives of the Fish and Wildlife Service, the Bureau of Reclamation, and the States of Colorado, Utah, and Wyoming in one instance, and Colorado, Nebraska, and Wyoming in the other. These groups, along with environmental organizations and water user interests, are trying to find solutions to conflicts between endangered species protection and water development and management in the Upper Colorado River and Platte River Basins. Such efforts should be encouraged as being wholly consistent with the Congressional directive in section 2(c)(2).

Section 7 Consultations

In 1982, with respect to the consultation process under Section 7, this Committee's report accompanying H.R. 6133 noted:

During fiscal years 1979, 1980, and 1981, a total of 1,945 formal consultations resulted in the issuance of a written statement. Of these, 1,772 resulted in a biological opinion of no jeopardy and 173 resulted in a finding of jeopardy (or 8.9% of these formal consultations).^{4/}

These figures have been used to illustrate the past success and effectiveness of the consultation process. While this may be true, other explanations may also exist.

First, the total number of formal consultations required (1,945) highlights the pervasive distribution of endangered and threatened species, and therefore the potential for conflicts. Further, most biological opinions are issued in routine compliance with the Act, and 173 jeopardy opinions represents a significant number of problems. At least they represent an obstacle to 173 projects. Second, the experience of western states' water interests demonstrate that some jeopardy opinions have been avoided through negotiations and agreement on measures to mitigate the potential adverse impact on endangered and threatened species, or actually enhance their status.

Section 7(b)(4) of the Act specifically provides for such mitigation, which has long been an accepted practice for the protection of fish and wildlife resources, particularly as it relates to water resource development and management. However, ambiguity exists in the Service's administration of the Act with respect to the standard or standards for determining and requiring appropriate mitigation measures, and fixing responsibility for such actions by federal, state and local agencies and project sponsors.

^{4/} H. Rpt. 97-567, Part 1 dated May 17, 1982.

Our experience with different water projects in the West generally, and particularly the Upper Colorado River and Platte River Basins, illustrate existing and potential problems related to the present consultation process and confusion about the limited requirements of section 7 to protect, not enhance, the current status of endangered and threatened species. The following is a brief outline of some of these problems. A more detailed project-by-project description is appended to this testimony. However, these examples are by no means an exhaustive tabulations of all existing problems and concerns.

In 1961, the City of Cheyenne prepared a plan to divert water from the Upper Colorado River Basin into the North Platte drainage. The Fish and Wildlife Service issued an opinion stating that the proposed diversion threatened the continued existence of endangered and threatened Colorado River Basin fishes. However, the opinion was reversed after the Cheyenne Board of Public Utilities agreed to provide up to \$180,000 to participate in a plan for the conservation of the fish.^{5/}

Of note, the new opinion distinguished between the project's threat to the continued survival of the species and its impact on recovery. The opinion states that the phrase, "jeopardize the continued existence of" is defined by regulation as an "activity or program that can reasonably be expected to reduce the reproduction, numbers, or distribution of a listed species to such an extent as to appreciably reduce the likelihood of the survival and recovery of that species in the wild."^{6/} Therefore, any action by a project sponsor or other non-federal interest which might impede recovery of a species is defined as jeopardizing its continued existence."

The Moon Lake Project near Bonanza, Utah, is a 400-megawatt coal-fired powerplant now under construction by the Deseret Generation and Transmission Cooperative (Deseret G&T). The plant will divert 30 cubic feet per second (cfs) from the Green River for cooling purposes. The Fish and Wildlife Service originally issued a jeopardy biological opinion stating that the critical flow requirements for endangered fish species in the Colorado River Basin were not known, but until completion of a continuing study, "all official biological opinions on water withdrawal without approved mitigating measures or alternatives will state that the withdrawal from the Green or White Rivers could jeopardize the continued existence of these fish."

^{5/} Fish and Wildlife Service Biological Opinion, dated May 29, 1981, addressed the USFS Denver Regional Forester.

^{6/} 50 CFR Section 402.02.

The opinion noted that the Utah Division of Wildlife Resources and Bio/West (an environmental consulting firm in Logan, Utah) had concluded that, "in and of itself the withdrawal of 30 cfs from the Green or White Rivers for the Moon Lake project would not jeopardize the continued existence of the fish species." Still, the Service claimed that, along with the cumulative impacts from other projects, their existence could be jeopardized. Subsequently, Deseret G&T agreed to pay up to \$500,000 for studies and programs designed to conserve the endangered fishes.^{7/}

In June, 1983, the Fish and Wildlife Service circulated a "draft conservation plan" for three endangered fishes in the Upper Colorado River Basin. This document suggested requiring maintenance of pre-1960 minimum flows. However, the Fish and Wildlife Service failed to compile and analyze endangered species data, which had been collected over the last twenty years, before making such a drastic proposal.^{8/}

In short, the requirements of the Act for protecting species under Section 7 may need better definition. The Western States Water Council questions the statutory basis from which the Fish and Wildlife Service has required state, local, and private project sponsors to agree to participate in recovery measures which enhance the status of a protected species in order to avoid a jeopardy opinion.

Section 7(a)(2) reads as follows:

Each federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency ... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of the habitat of such species.

The phrase "not likely to jeopardize the continued existence of any endangered species" is a limited prohibition and the Fish and Wildlife Service has exceeded its statutory authority by defining the phrase by regulation to include recovery of the species. The Secretary's jeopardy opinion, as generally rendered by the Fish and Wildlife Service, may only take into account the

^{7/} Fish and Wildlife Service Biological Opinion, dated May 13, 1981, addressed to Utah's State BLM Director.

^{8/} Colorado Water Congress testimony on H.R. 1027, dated March 14, 1985.

impact of a proposed agency action (and subsequently any related project sponsor's actions) based on the effect on the "continued existence" of the species.

Section 7(b)(3)(a) continues:

If jeopardy or adverse modification is found, the Secretary shall suggest those reasonable and prudent alternatives which he believes would not violate subsection (a)(2) and can be taken by the federal agency or applicant in implementing the agency action.

Such requirements, to avoid jeopardy, again may only be based on a project's threat to the "continued existence" of a species. Further, any non-federal project sponsor should only be responsible for an appropriate share of the cost of mitigating measures which are directly attributable to related project impacts.

Section 4(f) provides:

The Secretary [of the Interior] shall develop and implement plans (hereinafter in this subsection referred to as "recovery plans") for the conservation and survival of endangered species and threatened species

Section (3) states:

The terms "conserve," "conserving," and "conservation" mean to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary.

Such a stringent conservation standard is not required of federal agencies and project sponsors under Section 7. Rather, the Act places the affirmative responsibility of improving the condition of a species only upon the Secretary of the Interior. In other words, enhancement of a species' condition, or recovery, is a federal responsibility and cannot be required of project sponsors under pretense of Section 7(a)(2). Section 7(a)(2) only relates to situations where a federal agency action, and in turn the actions of a project sponsor, are likely to "jeopardize the continued existence" of an endangered or threatened species. It is only a mandate that the condition of a species may be made no worse by development than is already the case.

Thus, mitigating measures proposed by the Fish and Wildlife Service as an alternative to issuing a jeopardy opinion can only require a project sponsor to maintain a species' "status quo." Indeed, support for such an interpretation of the Act exists in traditional federal water policy which only requires projects to

mitigate adverse impacts on fish and wildlife. The federal government should assume the cost of project-related endangered species enhancement measures.

Further, some forum should be established whereby disagreements over biological, hydrologic, and other scientific facts can be challenged and resolved. The Fish and Wildlife Service has sometimes rendered biological opinions which lacked factual content and superficially addressed reasonable and prudent project alternatives.^{9/} Given the room for disagreement among experts, state and local interests should have access to some mechanism for challenging Fish and Wildlife Service determinations and receiving an unbiased judgement as to: (1) the minimum requirements to maintain a species' "continued existence," and (2) prudent and reasonable alternatives for mitigating direct negative project impacts.

In addition, an assessment of a project's cumulative effects is not required by the Act in rendering a biological opinion.^{10/} The only basis, perhaps, for considering cumulative impacts, involves taking into account necessary measures for bringing about recovery of a species. Again, however, recovery efforts are only required of the Secretary of the Interior under Section 4(f), and are not required of any federal agency or project sponsor under Section 7(a)(2).

Summary

In summary, some of the issues which have yet to be resolved and which are of concern to the Western States Water Council involve:

- (1) implementation of Congressional policy, as expressed in the 1982 Act, directing federal agencies to "cooperate with state and local agencies to resolve water resource issues in concert with conservation of endangered species;"
- (2) failure to observe the distinction between sections 7(a)(2) and 4(f), and the related federal and state responsibilities;
- (3) the biological, hydrological, and scientific integrity of Fish and Wildlife Service jeopardy opinions and recovery plans; and

^{9/} WSWC Position Statement, Endangered Species Act, July 31, 1981, adopted in Coeur d'Alene, Idaho.

^{10/} Ibid.

- (4) the final promulgation of rules implementing the 1982 changes to the section 7 consultation process.

We urge the Committee and the Congress to carefully consider the above comments.

Western States Water Council Position

Given the initiation of the Upper Colorado River and South Platte River Basins task groups, and the possibility for administrative remedies to the problems summarized above, the Western States Water Council supports a simple two-year reauthorization of the Endangered Species Act. Congress should then revisit the matter to determine whether or not administrative solutions have been found to conflicts between species conservation and vital western water resources development and management.

APPENDIXThe Cheyenne Water Development Project

In 1961, a water supply plan was prepared for the City of Cheyenne known as the Cheyenne Water Development Project. The three-stage plan entails diverting water from the Little Snake River, a tributary of the Yampa River in the Upper Colorado River Basin, into the North Platte drainage. Stage one of the project was completed in 1967. The City of Cheyenne sought a 23,000 acre-foot diversion for stage two, and the Fish and Wildlife Service originally issued a jeopardy opinion based on the assumption that the diversion would jeopardize the continued existence of endangered and threatened Colorado River Basin fishes. The opinion was reversed after the Cheyenne Board of Public Utilities agreed to provide up to \$180,000 to participate in a plan for the conservation of the species. ^{11/}

Of note, the new opinion distinguished between the project's threat to the continued survival of the species and its impact on recovery. The opinion states that the phrase, "jeopardize the continued existence of" is defined by regulation as an "activity or program that can reasonably be expected to reduce the

11/ Fish and Wildlife Service Biological Opinion, dated May 29, 1981, addressed to the Denver Regional Forester (USFS).

reproduction, numbers, or distribution of a listed species to such an extent as to appreciably reduce the likelihood of the survival and recovery of that species in the wild." 12/

Though the project would not appreciably reduce the likelihood of the survival of the species, with respect to recovery, the Fish and Wildlife Service claimed insufficient data was available to evaluate the impact of the project. However, because the endangered status of the fish can be related to decreased flows in the Colorado River Basin, additional water use was judged likely to make recovery of the species more difficult. The service ruled that the project would appreciably reduce the likelihood of recovery of the species, but that such impacts would be offset by the Board's agreement to participate in conservation and recovery measures.

Stage three of the project, to be funded with \$230 million of state money, is under study.

The Windy Gap Project

Similarly, with respect to the Windy Gap project in Colorado, the Fish and Wildlife Service determined it was not likely to jeopardize the continued existence of Colorado River fishes after requiring specific conservation measures to offset the impact of

12/ 50 CFR Section 402.02.

the project on the recovery of the fishes. These conservation measures included an average annual bypass of some 11,000 acre-feet to maintain downstream habitat. Further, the Northern Colorado Water Conservation District, the project's sponsor, agreed to fund the creation of backwater habitat areas and a field research team to evaluate habitat improvement techniques and continue collecting physical data. The Windy Gap Project would utilize existing features of the Colorado-Big Thompson Project to divert an average of 57,300 acre-feet of water from the Colorado River Basin to Colorado's eastern slope. 13/

The Moon Lake Powerplant

The Moon Lake Project near Bonanza, Utah, is a 400-megawatt coal-fired powerplant now under construction by the Deseret Generation and Transmission Cooperative (Deseret G&T). Using a series of shallow wells, the project would divert about 30 cfs from the Green River for cooling purposes. In addition, just over 300 acre-feet annually would be diverted from the White River, near Rangley, Colorado, for a related coal mining operation.

Originally, the Fish and Wildlife Service issued a jeopardy biological opinion which stated that the critical flow requirements for three endangered fish species in the Colorado River

13/ Fish and Wildlife Service Biological Opinion, dated March 13, 1981, addressed to the Lower Missouri Regional Director of the Bureau of Reclamation.

Basin were not known, but until a continuing study was completed, "all official biological opinions on water withdrawal without approved mitigating measures or alternatives will state that the withdrawal from the Green or White Rivers could jeopardize the continued existence of these fish." However, the jeopardy statement also included the following observation:

This opinion is not agreed upon by all experts. The position of the Utah Department of Health, the Utah Division of Wildlife Resources, and the Bio/West (environmental consultant firm in Logan, Utah) is that in and of itself the withdrawal of 30 cfs from the Green or White Rivers for the Moon Lake project would not jeopardize the continued existence of the fish species. However, along with the cumulative impacts from other projects, their existence could be jeopardized. 14/

Subsequently, Deseret G&T and the Fish and Wildlife Service agreed on specific mitigating measures to include either: (1) negotiation of the contract purchase of up to 30.5 cfs (22,089 acre feet) of water from Flaming Gorge Reservoir from the Bureau of Reclamation; or (2) a contract to pay up to \$500,000 for the

14/ Bureau of Land Management, Moon Lake Project Draft EIS, January 8, 1981, page 14.

purpose of financing studies and/or programs designed to conserve the endangered fish species in the Green and White Rivers. 15/

The first option has been eliminated for at least two reasons. First, the purchase of water from storage in Flaming Gorge actually does nothing to resolve the problem as the depletion of water from the river basin would be the same. Second, implementation of this option would have required approval by the Utah State Engineer for the change in the point of diversion and nature of use. This would have been at least problematic, particularly given the fact that Deseret G&T already holds a valid state water right for the withdrawal of 30 cfs from the Green River, and Utah does not recognize instream flows as a beneficial use for which water can be appropriated.

Though the first option was dropped, such offset requirements by the Fish and Wildlife Service raise grave questions concerning the rights of Upper Basin States to deplete their entitlements under existing laws and compacts on the Colorado River approved and ratified by the Congress and the States.

In the Moon Lake case, the powerplant is under construction and negotiations are now under way to determine the appropriate sum of the required money. Of note, the \$500,000 figure was determined by taking the estimated total cost of present Fish and

15/ Fish and Wildlife Service Biological Opinion, dated May 13, 1981, addressed to Utah's State BLM Director.

Wildlife Service recovery-management plans for endemic Colorado fishes, which is approximately \$20M, multiplied by 2.5% (which is equal to the proposed depletion of 22,089 acre-feet divided by the current depletion from the Green River of approximately 857,000 acre-feet).

The White River Dam

In 1978, the Utah State Legislature authorized construction of the White River dam and hydroelectric generation project in eastern Utah. The reservoir would supply water for development of oil shale resources in the Unita Basin, water for irrigating Indian lands, and a run of the river hydropower plant. The State of Utah, through project BOLD, has negotiated extensively with the Department of Interior to consolidate state lands and mineral lease holdings within the Unita Basin into economic mining units. A proposal ratifying the necessary exchange of federal and state lands was introduced in the 98th Congress. Providing an adequate and dependable water supply will be essential to future progress and development of the oil shale industry in eastern Utah.

A "no jeopardy" biological opinion was issued, with approved mitigating measures, after two years of consultation between the Fish and Wildlife Service and the Bureau of Land Management and an extensive study of the endangered Colorado fishes. The State of Utah did not pressure the Fish and Wildlife Service for an earlier opinion, in part due to clear indications that a jeopardy opinion

would be issued. At end, the state agreed to the following mitigating measures: (1) outlet works designed to allow water releases from different reservoir levels to maintain natural water temperatures; (2) specific minimum releases; (3) habitat enhancement; (4) possible propagation and supplemental stocking; (5) development of a reservoir fishery using only native species; and (6) participation in further studies. The possibility of a fish ladder has also been left open. ^{16/} A re-evaluation of the above requirements is likely once the economics of the oil shale industry bring construction of the dam closer to reality. Further, continuing studies of the endangered fishes have discounted the possibility of the White River as a spawning area, and thereby reduced its importance as habitat.

All of the above problems relate to water withdrawals from the Upper Colorado River Basin, but there are also conflicts in other western river basins.

Stampede Dam and Reservoir

The Washoe Project Act of 1958 authorized \$52M for construction of the Stampede Dam and Reservoir under federal reclamation law. The Act specifically included up to \$2M for measures to permit increased minimum water releases from Lake Tahoe and

^{16/} Fish and Wildlife Service Biological Opinion, dated February 24, 1981, addressed to the Utah State BLM Director.

restoration of the Pyramid Lake Fishery. ^{17/} The project was constructed prior to final agreement and signing of the repayment contract with the Carson-Truckee Water Conservation District. Subsequent to construction of the project, the Secretary of Interior determined that the Endangered Species Act required him to operate the Stampede Dam so as to conserve the qui-ui fish and Lahontan cutthroat trout, endangered species. The Secretary further determined that there was no excess water to sell after fulfilling this statutory obligation.

The Carson-Truckee Water Conservation District and Sierra Pacific Power Company sought a declaratory judgement that the Secretary of Interior violated the Washoe Project Act, and related reclamation laws, in refusing to sell water from Stampede Dam for municipal and industrial use in the Reno and Sparks, Nevada area. While conceding the Secretary has an obligation under the Endangered Species Act, the local interests challenged the extent of that obligation. The Secretary's decision was upheld by a district court and the U.S. Ninth Circuit Court of Appeals. A petition for a writ of certiorari has been denied by the U.S. Supreme Court. The Western States Water Council prepared an amicus brief in that case (Nevada v. Hodel), which was signed and filed on behalf of eleven states on February 22, 1985. The issue addressed is "whether the Endangered Species Act requires the Secretary of Interior to restore endangered species to original

^{17/} Washoe Project Act of 1956, 70 Stat. 7175, as amended, 43 USC §614c-614d.

population levels by utilizing resources authorized by Congress for reclamation purposes where the intent of the reclamation statute can be achieved without jeopardizing endangered species."

Wildcat Dam and Reservoir

The Riverside Irrigation District and the Public Service Company of Colorado have proposed a dam and reservoir on Wildcat Creek, a tributary of the South Platte River in Morgan County, Colorado. The developed water would be used for irrigation and for cooling a coal-fired powerplant. After obtaining from the State of Colorado all water rights pertaining to the dam's construction, the District sought the necessary Section 404 dredge and fill permit (nationwide permit) required under the Clean Water Act.

However, the Corps of Engineers denied the permit because of a Fish and Wildlife Service biological opinion which concluded: "The Wildcat Reservoir is likely to jeopardize continued existence of the whooping crane and adversely modify a 53-mile reach of the Platte River which is critical habitat for the crane." 18/ The critical habitat area is located approximately 250 miles downstream from the proposed reservoir project. The whole basis for the finding of adverse modification of the habitat was that water

18/ Fish and Wildlife Biological Opinion, dated December 20, 1979, addressed to the Corps of Engineers.

depletions from Wildcat Creek, and subsequently the North Platte River, would result because of construction of the dam. The irrigation district challenged the Corps decision in court, which has now been upheld by the U.S. Tenth Circuit (Riverside Irrigation District v. Andrews).

Grayrocks Dam and Reservoir

The Riverside case is but a delayed replay of the controversy surrounding the Grayrocks Dam and Reservoir Project. As part of the Missouri River Basin Power Project, Grayrocks Dam provides cooling water for the 1500-megawatt coal-fired Laramie River Power Station. It also provides irrigation water and recreation benefits. The project was subject to Endangered Species Act limitations under Section 7 due to Rural Electrification Administration (REA) loan guarantees, and again a Corps 404 permit. The Fish and Wildlife Service opposed the project because of the possibility that it and other existing and proposed projects could reduce the flows of the Platte River sufficiently to adversely impact critical habitat of the whooping crane nearly 300 miles downstream in Nebraska.

Short circuiting the then newly approved exemption process, Congress amended the Act to require the Endangered Species Committee, notwithstanding any other provision of law, to consider exemption of the Tellico and the Grayrocks Dams from the requirements of Section 7(a) within 30 days of the date of

enactment of the 1978 amendments and render a decision within 90 days of enactment. Otherwise, the projects would be exempted. Congress further directed the relevant federal agencies to require modifications to the Grayrocks Project to "insure that actions authorized, funded, or carried out by them relating to the Missouri Basin Power Project do not jeopardize the continued existence of such endangered species or result in the destruction or adverse modification of habitat of species ... after consultation as appropriate with the affected States."^{19/} The Congress made no reference to recovery or conservation of the species. Rather the only mitigation requirement was that agency actions not jeopardize the species' continued existence.

The final mitigation measures, which were approved by the Endangered Species Committee, were developed independent of the Section 7 consultation process, by parties to litigation involving the project, as part of an Agreement for Settlement and Compromise signed December 4, 1978. ^{20/} Under the settlement, the Missouri Basin Power Project agreed to: (1) limit its maximum water use to 23,250 acre-feet annually; (2) establish a \$7.5 million trust fund for the maintenance and enhancement of the whooping crane's critical habitat along the Platte River (including the purchase of

19/ Section 10(i)1, P.L. 95-632, Amendments to the Endangered Species Act, November 10, 1978.

20/ Endangered Species Committee, application for exemption for Grayrocks Dam and Reservoir, order dated February 7, 1979, signed by Interior Secretary Cecil Andrus. See also 9 Environment Reporter 1418.

water rights downstream to replace depletions caused by the project); and (3) otherwise restrict operations of the project. Further, the Fish and Wildlife Service noted that it would likely oppose any future depletions on the Platte as a threat to the critical habitat of the whooping crane. The Fish and Wildlife Service's purpose in opposing further depletions was to maintain flood flows which remove underbrush which is used as cover by predators in stalking whooping cranes.

With respect to the Grayrocks Project and the whooping crane, the critical habitat on the Platte River in central Nebraska, as proposed by the Fish and Wildlife Service in 1975, included an area of 2600 square miles -- much of which had not had a confirmed whooper siting in many years.^{21/} Following public protest, the final designation included a three-mile wide strip along the Platte River with a total area of less than 260 square miles. Of note, suitable crane habitat along the Platte shrunk by over 50% between 1938 and 1976, but during this same period the whooping crane population nearly quadrupled.

This suggests that perhaps the loss of habitat was not that critical after all. Rather, the goal of Section 7 is not simply conservation of endangered species, but preservation of natural ecosystems. The Fish and Wildlife Service, faced with planned

^{21/} Winston Harrington, "The Endangered Species Act and the Search for Balance," Natural Resources Journal, Volume 21, page 83.

depletions on the Platte River which totalled over 40% of the annual flow, some of which might be beyond the jurisdiction of the Endangered Species Act, took a very conservative stance. The major issue inherent in implementation of past endangered species policy has not been whether projects that will eradicate a species will be allowed, but the extent to which activity will be controlled to reduce the risk faced by endangered species. 22/ At present, the issue is over responsibility for mitigation and enhancement measures to reduce risks to species status, if any, caused by necessary development.

There are several other examples of past, present and potential conflicts between western water development projects and the conservation of endangered species. Further, conflicts will continue to increase as more species are listed and the demand grows for limited water resources.

22/ Ibid.

STATEMENT OF THE
COLORADO WATER CONSERVATION BOARD

BEFORE THE
SUBCOMMITTEE ON THE ENVIRONMENT
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

CONCERNING REAUTHORIZATION OF THE ENDANGERED SPECIES ACT

April 16, 1985

Washington, D.C.

Introduction

I am J. William McDonald, Director and Secretary of the Colorado Water Conservation Board, which is the state agency charged with the protection, conservation, and development of the water resources of the State of Colorado.

Summary

Joint federal-state-private efforts are underway to solve problems which have arisen from the application of the Endangered Species Act to water resources development in the State of Colorado and other western states. The problems which have been encountered are substantial ones which have the potential to adversely impact: (1) the development of the waters to which the states are entitled pursuant to interstate compacts and decrees, and (2) the exercise of vested property rights under state water law. We believe that the efforts to resolve these problems merit the oversight of Congress, with directions to the Department of the Interior to report on their outcome in the context of a review and reauthorization of the Act in 1987. Thus, it is urged that the Endangered Species Act be reauthorized for only two years.

The Water Conservation Board is concerned about several aspects of the administration of the Endangered Species Act. In the event that the current efforts to find administrative solutions to conflicts between the Act's administration and water resources development are unsuccessful or require legislative confirmation, then Congress should deal with the necessary amendments to the Act two years from now.

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Statement

Water project development in Colorado inevitably entails federal agency action of some sorts. Even when projects are privately financed, the large amount of federal land ownership in Colorado (about one-third of the state's land area) or the requirement for section 404 permits under the Clean Water Act bring the federal government into the project development process.

Consequently, the consultation procedure called for in section 7(a)(2) and (b) of the Act is triggered for every water development project proposed in the Colorado River and Platte River Basins within Colorado. The involved federal agency must insure that its actions are not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of the critical habitat of such species. If jeopardy or adverse modification is found, reasonable and prudent alternatives must be implemented.

Because of section 404 of the Clean Water Act, the application of the Endangered Species Act to water development projects is not limited to isolated circumstances in Colorado or the other western states. The Act applies with equal force to water project development throughout the country. Furthermore, listed endangered fish species, and listed plants and birds which utilize riverine habitats, are found in at least 10 states outside the west. In short, the problems created by the Act for water development will be nationwide in scope, although problems in the western states seem to be receiving the most attention at this time.

Over the past four or five years, in both the Colorado River and the Platte River basins, the U.S. Fish and Wildlife Service (Service) has consistently taken the position when issuing biological opinions pursuant to section 7(b) that nearly any additional depletion of water, no matter how small and even though within the entitlement of a state pursuant to interstate compact, would necessarily jeopardize the continued existence of three endangered Colorado River fishes or of the whooping crane, or adversely affect the critical habitat for the same. The scientific bases for these judgments have been, at best, uncertain due to a lack of information about habitat requirements, life stages, etc.

Nonetheless, the Service has taken the position that the entire burden of such uncertainty about the condition or requirements of a species falls on a project proponent when the Service renders a biological opinion. It is not clear that this is either appropriate or authorized by the Act.

In certain instances, the Service has suggested in its biological opinions that the only reasonable and prudent

alternative available to a project is to provide specified instream flows. Such an alternative raises several problems:

- (1) there is often not a sound scientific basis for the suggested flows due to a lack of data,
- (2) in some instances the suggested flows would have been so large as to make a proposed project infeasible,
- (3) releases of water from a project for instream flows are not reasonably calculated to protect an endangered species if there is no legal mechanism by which such flows can be protected from subsequent diversion, especially when "deliveries" would be made across state lines and over very long distances, and
- (4) it fails to recognize the interstate compact entitlements of the states and vested property rights under state water laws.

Another major problem which has arisen is the apparent failure of the Service to recognize the distinctions between the requirements of section 4(f), which applies to recovery plans, and the requirements of section 7(a)(2). Pursuant to section 4(f), the Secretary of the Interior is to develop and implement recovery plans, the purpose of which is to identify and guide the implementation of the measures necessary to "conserve" an endangered or threatened species (i.e., bring a species back to the point of not requiring the protection afforded by the Act). In the jargon of the Service, the objective is to "recover" a species to the point that it can be "de-listed" (i.e., to provide for the "conservation" of a species so that it is no longer "endangered" or "threatened" within the statutory definition of those three terms).

Section 4(f) of the Act places the affirmative responsibility for the conservation of a species only upon the Secretary. Nowhere in the Act is it stated that the implementation of recovery plans, and the measures included therein, are the obligation of anyone other than the Secretary. As a corollary, the cost of implementing the measures in a recovery plan is the responsibility of the federal government.

In contrast, section 7 of the Act deals only with those situations in which federal agency actions, and in turn the actions of a water project's proponents, are likely to jeopardize the continued existence of an endangered or threatened species, or adversely affect its critical habitat. This is a requirement only that the condition of an endangered or threatened species be made no worse by a developmental project than is already the case (i.e., that a project not increase the danger of extinction of a species). This standard requires considerably less of a project proponent than the affirmative obligation placed on the Secretary

for recovery plans, which obligation requires the Secretary to make a species "better off."

Despite this clear statutory distinction, there has been a tendency in the Service to treat reasonable and prudent alternatives under section 7 as if they are the means by which a recovery plan is implemented. This is not a burden which the Act imposes on a project proponent.

Matters came to a head in 1983 as a result of two actions by the Service. The first was a formal biological opinion for the federally authorized Narrows project in northeastern Colorado. In that biological opinion, the Service concluded that the project would jeopardize the continued existence of the whooping crane, the critical habitat for which is located some 265 miles downstream in Nebraska. The "reasonable and prudent alternative" which the Service suggested was to forego about one-third of the yield of the project for releases to instream flows which allegedly would arrive 265 miles downstream after crossing a stateline (the flows at which are subject to an interstate compact) and after passing untold numbers of headgates which could not be prevented from diverting the waters so released. Furthermore, there was little, if any, evidence demonstrating that such releases would accomplish the channel scouring which was sought. In short, the proposed alternative was not reasonably calculated to actually minimize any adverse effects on the whooping crane.

The other action was the release of a document styled a draft "conservation plan" for the three endangered fish species in the Upper Colorado River Basin. This document, as had earlier biological opinions, proceeded on the assumption that there could be no further depletions whatsoever to the Upper Colorado River system without jeopardizing the continued existence of these fish species. It suggested that pre-1960 minimum flows be maintained, including very large flushing flows which could have effectively prevented the State of Colorado from achieving any further water project development even though it is entitled to about 1 million acre-feet of additional annual depletions under the relevant interstate compacts.

In light of the problems being encountered, the Colorado Department of Natural Resources, the Colorado Water Conservation Board, and Colorado water users suggested that there be joint efforts in both the Upper Colorado and Platte River basins to seek solutions satisfactory to all concerned. The result has been the execution of a memorandum of understanding between the Service, the Bureau of Reclamation, and the states of Colorado, Wyoming, and Utah in the case of the three endangered Colorado River fishes, and the implementation of a joint effort by the Service, the Bureau, and the states of Colorado, Nebraska, and Wyoming to deal with the whooping crane issues in the Platte River basin.

The objective of both efforts is to seek ways which will meet the requirements of the Act without conflicting with state water rights systems and the use of water apportioned to a state pursuant to interstate compacts and decrees of the U.S. Supreme Court. It is also intended that reasonable and prudent alternatives be identified which will minimize the use of water. Such measures may include habitat acquisition, management, and maintenance, artificial propagation (e.g., through hatcheries), legally appropriate uses of federal reservoirs, reduced planting of competing exotic sport fishes, and others which can be effected to the benefit of the species without impairing beneficial uses of water under state law.

Both efforts are premised upon a willingness to try to avoid conflicts between the Endangered Species Act and the exercise of vested state water rights. We support these efforts because we do not believe that protracted litigation in an adversarial climate would be to anyone's benefit and because we are sincerely hopeful that the ongoing administrative efforts will indeed prove to be fruitful. If the involved parties will start from the premise that both the requirements of the Endangered Species Act and state water laws and compact entitlements can each be fully protected, we believe that the problems of the past several years can be resolved.

We regard these efforts as well within the scope of the Act and the discretion which it provides to the Secretary of the Interior, particularly in light of the directive of section 2(c)(2). This section states that it is the "policy of Congress that federal agencies shall cooperate with state and local agencies to resolve water resource issues in concert with conservation of endangered species."

We respectfully request that Congress give recognition to the on-going administrative efforts described above and direct the Secretary of the Interior to report back to it in the context of a review and reauthorization of the Act two years from now in order to insure that every reasonable effort has been made to administer the Act in a manner which resolves the problems which have been encountered. In the event that the current efforts are unsuccessful, then Congress should deal with necessary amendments. It may also be that the solution to which the involved parties will hopefully come over the course of the next two years will require a legislative confirmation in order to be properly implemented. For these reasons, reauthorization of the Act at this time should be for only two years.

We believe that the efforts to find administrative solutions are reasonable and responsible ones which bear the support of this committee. We ask that you express that support by reviewing the Act's administration at the end of a two-year reauthorization period.

Statement of Colorado Water Congress
to Senate Subcommittee on the Environment
Regarding Reauthorization of the Endangered Species Act
(Committee on Environment and Public Works)
April 16, 1985

INTRODUCTION

Mr. Chairman, Members of this Subcommittee, I am Gregory J. Hobbs, Jr., with the firm of Davis, Graham and Stubbs, Denver, Colorado. My co-witness is Tom Pitts, Professional Engineer, Loveland, Colorado. We are here today on behalf of the Colorado Water Congress, a statewide water users organization made up of agricultural, municipal, and industrial members, representing approximately 1200 municipalities, conservancy districts, ditch companies, businesses, and other organizations which are vitally concerned with the protection and development of Colorado's water resources. For the last fifteen and half months, the Colorado Water Congress, through its Special Project on Threatened and Endangered Species, has been working diligently towards resolution of conflicts between the administration of the Endangered Species Act and the water allocation and management systems of the states.

The Special Project was created in response to a tentative draft recovery plan by the U.S. Fish and Wildlife Service (FWS) for the Colorado River native fishes, which, if implemented, would have abrogated State water rights systems and nullified water allocation under long-standing interstate water compacts and equitable apportionment decrees of the

United States Supreme Court. See Appendix, Exhibit 1, "Background of the Working Group Approach." Controversy over the tentative recovery plan led to establishment of the Colorado River working group comprised of representatives of the Fish and Wildlife Service, the Bureau of Reclamation, and the States of Wyoming, Utah, and Colorado, with assistance by water user and conservation groups. A similar group, involving the States of Nebraska, Wyoming, and Colorado has recently been established to address endangered species/water issues in the Platte River Basin.

RESOLUTION OF ENDANGERED SPECIES/WATER ISSUES

Experience in working towards solutions in the Colorado and Platte basins, with the objective being equal respect for the water laws of the States and the Endangered Species Act, is showing that conflict can be minimized or eliminated by careful choice of management alternatives, such as fish hatchery rearing and stocking, in the Colorado River Basin, and mechanical brush and tree clearing in the Platte River Basin.

Given existing interstate compact water delivery requirements and reregulation of the Colorado and the Platte Rivers by reservoir releases and return flows from upstream uses, the habitat of the Colorado River fishes and the whooping crane will always have water. It may be, in the Platte River Basin, that a carefully placed reservoir, off

channel, just above the whooping crane habitat, is the best and most reliable means to supply flows that may be needed through the crane habitat. These and other possibilities need to be examined in the working group.

The Fish and Wildlife Service, when dealing with potential conflict between the Endangered Species Act and the water laws, compact entitlements, and equitable apportionment decrees of the states, should start from the premise that both will be fully maintained. If this premise is the starting point, we are convinced that solutions can be found.

The Colorado Water Congress is seeking an appropriate, effective, scientifically supportable, administrative solution. We believe that such a solution is achievable under the current Endangered Species Act. Such a solution would:

1. Recognize that artificial propagation and stocking are often necessary for conservation of endangered species.
2. Emphasize the use of management alternatives for recovery of endangered species which are not in conflict with state water rights administration systems or interstate water compacts.
3. Recognize that the goals and terms of the Endangered Species Act can be accomplished in a way that fully

maintains state water allocation systems and the interstate water compacts.

We believe that the Secretary of the Interior has the discretion in the existing Endangered Species Act to implement these approaches to endangered species recovery. We are working in an administrative process to find out if these solutions can truly be implemented in this way. In the event we find, or the Secretary of the Interior finds, that implementation of reasonable approaches to Endangered Species Act cannot be implemented, we will want to come back at the end of the process which is now going forward in the Platte and Colorado River basins, now projected to occur within the next six to eight months, and suggest appropriate modifications to the Act. We are, therefore, requesting a two year reauthorization of the Act which will allow time to determine if the provisions of Section 2(c)(2) of the Endangered Species Act can be implemented successfully. Section 2(c)(2) provides that:

"It is further declared to be the policy of Congress that the federal agencies shall cooperate with state and local agencies to resolve water resource issues in concert with the conservation of endangered species."

Factor Affecting the Native Colorado River Fishes

At the House Subcommittee's hearing on March 14, 1985 certain conservation groups, in our opinion, seriously

misrepresented the factors which affect the population of native fishes in the Colorado River Basin. These groups also asked the Committee and the Congress to disapprove the "Windy Gap" approach to Section 7 consultations under the Endangered Species Act.

The "Windy Gap" approach, though it has been criticized as "extortion" by some water interests and not protective enough by some environmental interests, is contributing directly to the conservation and recovery of the Colorado River fishes, because it identifies conservation and recovery measures and scientific field work, which project sponsors help to fund as water use goes forward in the basin. Pending the development of recovery plans, which is underway, the Windy Gap approach was fashioned to meet the goals and terms of the Endangered Species Act, while avoiding conflicts with state water allocation systems, equitable apportionment decrees of the United States Supreme Court, and interstate water compacts ratified by the United States Congress.

In light of testimony at the March 14th House hearing, the Colorado Water Congress submits additional facts and discussion to the Senate Environment Committee regarding endangered species/water use conflicts and their resolution.

The testimony of the conservation groups singled out flow reduction and dams as the sole or primary cause of decline of the native Colorado River fishes. This testimony omitted the following factors which affect the current status of the fishes:

1. Colorado River squawfish were commercially harvested in the late 19th and early 20th centuries.

2. Historic and ongoing stocking of game fish - by the Federal and State governments, particularly bass, pike, and catfish - has introduced predators which feed on the young native fishes.

3. Game fish have introduced parasites and diseases which have infected the native fishes.

4. Federal and State governments attempted to eradicate the native fishes, by poisoning reservoirs and more than 500 miles of major rivers in the Upper Colorado River Basin alone, to remove what were then called "trash" or "rough" fish and to create habitat for game fish. See Appendix, Exhibit 2, "Factors Affecting the Population of Endangered Fish Species in the Colorado River Basin." *

We emphasize that there has been no showing that depletion of water from streams in the Upper Colorado River Basin, under the applicable interstate compacts and the laws of the States, is the cause of endangerment to the native fishes. After more than a year of study, the Upper Colorado River Basin Coordinating Committee (the "Colorado River working group") effort has not produced any scientific evidence correlating flow reductions with the decline in endangered fish populations. To the contrary, 1983 and 1984 were very high flow years in the Upper Colorado Basin. The cold water runoff actually contributed to decline of the

*Retained in committee files.

young-of-the-year population of the native fishes during those two years. Additional storage and depletions during these years would likely have benefited the fishes.

Hydrology of the Colorado River Basin
and the Law of the River

The 1922 Colorado River Compact was adopted by the States of Wyoming, Utah, Colorado, New Mexico (the "Upper Basin") and Arizona, Nevada, and California (the "Lower Basin") and was ratified by Congress, 42 Stat. 171. This Compact guarantees an average delivery of seven and one half million (7,500,000) acre feet of water annually from the Upper Basin to the Lower Basin on a 10-year running average. A copy of the Compact, as codified in Colorado law, is attached, Appendix, Exhibit 3.* Thus, the Upper Basin States cannot "dry up" the Colorado River. This vast quantity of water will continue to flow through the habitat of the endangered species, making flows available for the native fishes and other wildlife as an inevitable by-product of the "Law of the River."

In our opinion, the conservation groups misled the House Subcommittee by suggesting that "80-95 percent of the water available" in the Colorado River system "has been stored, diverted, or consumed." The facts are that 50% of the supply of the Colorado River system cannot be consumed by the Upper Basin. The Upper Basin's share is allocated under the 1948 Upper Colorado River Compact, which was ratified by Congress, 63 Stat. 31.

*Retained in committee files. -7-

It would be the height of folly, a breach of historic legal agreements, and unnecessary to deprive States of the exercise of rights to water allocations which they have under interstate compacts and equitable apportionment decrees.

Section 7 of the Endangered Species Act requires the Fish and Wildlife Service to pursue "reasonable and prudent alternatives." It is not a reasonable and prudent alternative to prevent or restrict depletions which the States and their water users are entitled to make. On a scientific basis, use of water in the Upper Basin under the compacts has not been and cannot be correlated to the decline, or prevention of recovery, of the native fishes.

The "Windy Gap" approach, pending an agreed upon recovery program and alternative funding mechanisms, is a reasonable and prudent alternative to what otherwise would be irreconcilable conflict between the Endangered Species Act and the "Law of the River." The use of this approach by the Fish and Wildlife Service has led to the affected States and their citizens working towards conservation of endangered species, rather than opposing the Act and asking for restrictive amendments or exemptions from the Act's coverage.

The Windy Gap Approach

In 1981 the Fish and Wildlife Service issued a biological opinion for the Windy Gap Project, a water diversion project located near the junction of the Fraser and Colorado

Rivers, high up in the Colorado River Basin watershed. A copy of the Windy Gap opinion is attached, Appendix, Exhibit 4.* The project sponsor demonstrated that flow reduction downstream in the habitat of the native fishes, as a result of Windy Gap depletion high on the headwaters of the Colorado River, was so minute, under the worst possible case, that it could not be measured or predicted to make any difference at the point of impact on the native fishes. The Fish and Wildlife Service opinion concluded that: "In short, it is reasonably expected that the impacts of the project on the likelihood of survival of the fish are extremely small." Therefore, a decision was reached that "the Windy Gap Project is not reasonably expected to appreciably reduce the likelihood of survival of the endangered fishes of concern." See Windy Gap Opinion, p. 6. To resolve any remaining concern about the project's effect on recovery of the species, the project sponsor (the Municipal Subdistrict, Northern Colorado Water Conservancy District) agreed to help fund work related to the fishes. The project sponsor agreed to pay, and has paid, over half a million dollars (\$550,000.00) for conservation and recovery measures. See Windy Gap Opinion, p. 8.

The funds derived from the project sponsor were designated for:

1. Establishment of backwater habitat areas along the mainstream of the Colorado River between DeBeque Canyon in

*Retained in committee files.

Colorado to the confluence of the Colorado and Green Rivers in Utah;

2. Support of a field research team of 3 to 4 persons, over a 3 year period, to evaluate habitat improvement techniques for the endangered fish species, and to continue collection of physical data need to assess the impacts of water depletion, sedimentation, and water quality changes on the life cycles of the native fishes.

In other words, under the Windy Gap approach, which has been used with regard to other water projects since 1981, private and local government water users have funded conservation and recovery measures designed to accommodate exercise of water rights in concert with the goals and terms of the Endangered Species Act.

It is extremely unfair and counter-productive to accuse water interests and the Fish and Wildlife Service of ignoring the Endangered Species Act. To the contrary, during a time when federal funding for water projects has been almost non-existent in the Upper Colorado Basin, and when federal funding for endangered species conservation is said by conservation groups to be inadequate to meet demands nationwide, financing has been forthcoming in the Colorado River Basin from water project sponsors to pursue very practical, needed work regarding the native fishes. The assessment of costs for such measures under the Windy Gap approach has been controversial among water users, who believe

that the endangered species program should be funded entirely by Congress, since the Act sets forth a national goal. But the Windy Gap approach has attained acceptance, for the most part, while further conservation and recovery measures and funding alternatives are being examined by the Colorado River working group.

Information gathered in the past few years has been very useful in defining recovery measures. For example, habitat work and field work, using Windy Gap Project funds, has shown that game fish are a significant contributing factor to loss of young-of-the-year squawfish. For example, a 1985 report of the Fish and Wildlife Service, submitted herewith, summarized a field project regarding bass predation. Very young squawfish were stocked in ponds containing bass. Right after introduction of the squawfish, "diets of the bass switched almost entirely to squawfish." Between "21 and 79 percent of the squawfish stocked were eaten the first night." The report concluded that "bass predation is obviously a very potent mortality factor." Predation resulted in "almost complete annihilation within two months." (See "Annual Report, Survival of Stocked Colorado Squawfish with Reference to Largemouth Bass Predation, January 15, 1985," pp. 8, 18, cited in Appendix, Exhibit 5, pp. 4-5). Utilizing hatchery rearing techniques recognized by the Fish and Wildlife Service, squawfish can be grown in large quantity to a size where they are not subject to predation. See Appendix,

Exhibit 5, Hatchery Rearing and Stocking of Endangered Fish Species.* See also Appendix, Exhibit 6, August 19, 1983, Letter of Upper Colorado River Commission to Galen Buterbaugh.*

The technology for hatchery rearing of native Colorado River fishes has been developed and is being used. In the Upper Colorado River Basin, 185,000 hatchery-reared squawfish have been released since 1980, and 7,300 hatchery-reared humpback chub have been released. In the Lower Colorado River Basin, 6,400,000 hatchery-reared razorback sucker have been released. The razorback sucker was characterized, wrongly we think, in view of the stocking effort, as being "near extinction" in House testimony before the House Subcommittee on March 14, 1985 (Davison, 1985).

It is unrealistic, and it would be a violation of the Law of the River, to shut down or remove dams and diversions in favor of returning to a completely natural Colorado River basin. Reasonable and prudent administration of the Endangered Species Act should recognize the continued development of water under the interstate compacts, equitable apportionment decrees, and water laws of the states.

Under the "Windy Gap approach" a number of projects have contributed funds to conservation measures. A Colorado River working group, which includes representatives of the Fish and Wildlife Service, the Bureau of Reclamation, and the States of Utah, Wyoming, and Colorado-assisted by water user and conservation groups - is formulating further conservation

*Retained in committee files.

and recovery measures for the native fishes. Their work is expected to result in a report toward the end of 1985 or early 1986.

A Cooperative Program For Conservation and Recovery

Contrary to the testimony delivered at the March 14 House hearing by certain environmental groups, this working group process and the Windy Gap approach are proceeding in a way which is consistent with the Endangered Species Act. The funds derived from the Windy Gap approach are being used for the development and implementation of sound conservation measures and refinement of scientific information regarding the fishes. Section 2(c)(2) of the Endangered Species Act states that the "federal agencies shall cooperate with state and local agencies to resolve water resources issues in concert with the conservation of endangered species." This is precisely what the Colorado River working group and the Windy Gap approach accomplishes.

We strongly oppose any suggestion that the Fish and Wildlife Service or the Congress should establish a moratorium on water development. We encourage Congress to endorse the working groups and other efforts of the Fish and Wildlife Service to administer the Endangered Species Act in concert with laws governing the allocation and use of water.

In the Platte River Basin it appears that the whooping crane habitat in Nebraska can be maintained through

mechanical means to clear out roosting sites for the crane. Previously, it was claimed that large water flows were needed for this purpose. Water development activities and return flows from irrigation projects provide year round flows in the Platte River, a river which, historically, was frequently bone dry during the summer and fall months.

Again, as in the Colorado River Basin, interstate water allocation compacts and decrees guarantee that water will be available downstream. These include the 1924 South Platte River Compact, 44 Stat. 195, and the equitable apportionment decrees of the United States Supreme Court in Wyoming v. Colorado, 259 U.S. 419 (1922) and Nebraska v. Wyoming, 325 U.S. 589 (1945). Wildlife management methods can be utilized to alleviate potential conflicts between state water allocation systems and the Endangered Species Act.

The testimony of certain environmental groups before the House committee has raised the specter of a halt to, or curtailment of, needed water development. This would destroy efforts to carry out the goals and objectives of the Act while upholding other important national and state goals and objectives. The Congress should encourage, not discourage, efforts of the Fish and Wildlife Service in this regard.

The Colorado Water Congress endorses a two year reauthorization. This would allow the Colorado River and Platte River working groups to further refine measures and funding for the conservation and recovery of the native

Colorado River fishes and maintenance of the whooping crane habitat. We anticipate that the working groups will present the Congress, the States, project sponsors, and environmental groups with measures and funding mechanisms which will involve ongoing efforts to recover the species while fully respecting state water management and allocation systems. We presently believe that the Secretary of the Interior has the authority under the Endangered Species Act program to implement such plans and programs.

With the results of the working group efforts in hand, Congress can then determine what further authority, if any, is needed to avoid and resolve potential endangered species/water use conflicts in river basins. Given the large geographic scope of the Platte and Colorado River basins, the working group product is expected to be a model for application elsewhere as similar problems arise. A longer reauthorization period leaves little alternative but to seek substantive amendments to ensure that state and interstate water allocation systems will not be displaced by implementation of the Endangered Species Act.

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BACKGROUND OF THE WORKING GROUP APPROACH

COLORADO RIVER BASIN

In June, 1983, the U.S. Fish and Wildlife Service circulated a "draft conservation plan" for three endangered fish species in the Upper Colorado River Basin which would have (a) required maintenance of pre-1960 minimum flows, including a 17,000 cfs "flushing flow," (b) established a priority system based on consultation under the Federal Endangered Species Act rather than on State water rights allocation systems, and (c) nullified long-standing interstate water compacts.

Initial Special Project activities included interviewing FWS personnel to determine methods of implementing the plan, and the scientific basis, if any, for the minimum flow proposals. CWC engaged the services of Ecosystem Research Institute of Logan, Utah to compile an endangered species data base from existing State and Federal sources. CWC learned that FWS had no biological basis for the minimum flow recommendations, and that they were based on simply maintaining pre-1960 hydrologic conditions in the Upper Basin. In the process of requesting biological data from FWS and State wildlife organizations, CWC learned that the Federal government had not compiled and analyzed endangered species data, which had been collected over the last twenty years, prior to making its drastic proposals. CWC found that FWS had no data indicating that imposition of minimum flows in the Upper Basin would guarantee survivability of the endangered species. Other significant factors affecting endangered species, including predation by game species, were ignored. FWS subsequently withdrew its "draft conservation plan" and initiated a new process to develop a plan for managing endangered species in the Upper Colorado Basin.

Subsequently the Department of the Interior established a joint working group comprised of representatives of Wyoming, Utah, Colorado, the Fish and Wildlife Service, and the Bureau of Reclamation. The goal of the group is to recommend an administrative solution to endangered species problems which assures the conservation of endangered species and fully respects state water rights systems, interstate water compacts, and equitable apportionment decrees. The Water Congress and environmental organizations are also participating in this effort.

The Colorado Water Congress supports an administrative solution which emphasizes, as the first priority, management alternatives which are consistent with individual state

water allocation systems. A hatchery and stocking program for endangered fishes is one such means. A recovery plan should be established which recognizes full development of the water entitlements of the various Colorado River basin states and allows water projects to proceed without receiving jeopardy opinions.

PLATTE RIVER BASIN

In January, 1983, FWS rendered a jeopardy opinion under the Endangered Species Act on the Narrows Project in northeastern Colorado. This opinion, which could equally apply to all water projects in the Platte River Basin in Colorado, Wyoming, and Nebraska, stated that adverse modification of the whooping crane habitat could be alleviated if the Narrows Project proponents (U.S. Bureau of Reclamation) would deliver 32,000 acre-feet of water more than 100 miles downstream at Overton, Nebraska. Assuming that would even be feasible, and it may not be if carriage losses are considered, approximately one-half of the yield of the Narrows Project might have had to be released to try to meet this requirement. In October, 1983, the Fish and Wildlife Service published a proposed plan for maintaining flow requirements in the Platte River in central Nebraska. The plan included maintenance of 3800 cubic-feet-per-second for twenty-three days, as well as 1100 cfs flows during the spring and fall at a minimum. Such flows would prevent development of the water entitlements of Wyoming, Colorado and Nebraska.

In late 1983, the Bureau of Reclamation (USBR) and FWS organized a Federal/State working group to review the situation and develop a work plan for the Platte. As of September, 1984, this work plan had been under discussion for approximately a year without Federal/State agreement on the approach to be taken.

In the meantime, water users in Colorado, Wyoming, and Nebraska formed an Interstate Task Force on Endangered species and asked the Secretary of the Interior to establish a working group process similar to the effort on the Colorado River.

The Secretary of the Interior responded favorably. The first meeting of the reconstituted Federal/State Coordinating Committee on the Platte River Basin was held March 12, 1985. The Colorado Water Congress looks forward to active participation, along with other interested parties, with the goal being a constructive solution that assures conservation of endangered species while fully maintaining the water allocation and management systems of the states.

ANSWERS TO ADDITIONAL QUESTIONS OF CHAIRMAN CHAFEE
TO GREGORY J. HOBBS, JR.,
APPEARING ON BEHALF OF THE COLORADO WATER CONGRESS

REGARDING THE ENDANGERED SPECIES ACT REAUTHORIZATION
BEFORE THE SENATE SUBCOMMITTEE ON THE ENVIRONMENT,
S. 725

Question 1: What is your perception of the "Windy Gap" opinion?

Answer: My perception of the Windy Gap opinion is that the Fish and Wildlife Service is using section 7 of the Act to require water project sponsors to fund conservation and recovery measures for the Colorado River native fishes which should be funded by the Congress under sections 4 and 5 of the Endangered Species Act.

I reach this conclusion because the Fish and Wildlife Service found, as a result of the section 7 consultation on the Windy Gap Project, that depletions of the Colorado River as a result of the project would not adversely affect the survival of the Colorado River native fishes. Yet the Service also said that the Windy Gap depletions, combined with other depletions in the future, would hamper efforts to recover the fishes (pp. 6-7, Windy Gap Opinion, attached to Statement of Colorado Water Congress, April 16, 1985).

Under Section 4 of the Act, recovery plans are the responsibility of the Secretary of Interior. Under section 5, the Secretary may purchase interests in land or water necessary to conserve threatened or endangered species. Rather than utilize these authorities, the Secretary employed section 7 consultation to obtain \$550,000.00 from the Windy Gap Project sponsors to fund conservation and recovery measures, which are identified in the opinion.

The Windy Gap sponsors, six cities of Northern Colorado, believed that their Project did not violate the Endangered Species Act, in view of the finding that flow depletions as a result of the project would not reduce the likelihood of survival of the native fishes, but they were unwilling to delay the project to see whether the Congress would fund the Service's conservation and recovery program. Therefore, they agreed to fund the measures identified by the Fish and Wildlife Service as contributing to the recovery effort.

Application of the Endangered Species Act to entire river systems, like the Colorado, will require national

funding of recovery plans. Project-by-project application of the Endangered Species Act is not a reliable means for obtaining funds for implementing a recovery program, which is a duty of the Secretary under section 4, since water projects are planned and developed at different times, over a large number of years.

Question 2: You have indicated your support for a two-year reauthorization period in order to insure timely review of the Act if ongoing coordination with the FWS is unsuccessful in resolving western water-endangered species conflicts to your satisfaction. Could you describe, in specific terms, what you would consider successful resolution of the conflicts?

Answer: Successful outcome of the current state/federal working group efforts would be the formulation and adoption of recovery plans which 1) are funded on a continuous and reliable basis, 2) do not interfere with each state's allocation of water under interstate compacts, equitable apportionment decrees, and state water management systems, 3) and result ultimately in the delisting of species.

In the Upper Colorado River Basin, such a plan should include a hatchery-rearing and fish-stocking program, which would enable the native fish to return to the streams at a size large enough to compete with game fish that prey on young native fishes.

The plan should assume and be based upon full development of each state's compact allocations under the 1922 Colorado River Compact and the 1948 Upper Colorado River Compact. Uncontracted and unused capacity in the large, already constructed federal reservoirs might be utilized, if necessary and to the extent consistent with a project's authorized purposes, to regulate compact water deliveries to benefit the fishes. Since the Upper Basin owes 7,500,000 acre feet per year to the Lower Basin, based on a 10-year running average, a large amount of water will necessarily be available to the fish.

New dam or diversion structures which might create a barrier to necessary migration of the fish during their critical life cycles should be designed and built in a manner which will not jeopardize survival of the fish.

Further scientific and field research of the fish should continue. A state/federal recovery team should be established to implement the plan. The plan should be funded as a national program.

The goal of the plan should be to prevent the extinction of the native Colorado River fishes and pursue their recovery while the Colorado River Basin states continue to develop their water compact entitlements.

Similarly, the method and goal of a recovery plan for the whooping crane in the Platte River Basin should be to conserve the species without impairing the water allocations of the states or their water management systems.

This can be accomplished, it appears, by continuing to utilize the mechanical and brush clearing techniques demonstrated successfully by the Platte River Trust. Construction of an off-channel reservoir, now being studied by the Bureau of Reclamation, as part of the Prairie Bend Project, Nebraska, could reregulate the river in central Nebraska for the benefit of the crane. Whether this is necessary as part of a recovery program should be examined by the Platte River working group.

In sum, successful resolution of potential endangered species - water use conflicts involves pursuit of the goals and terms of the Endangered Species Act in a manner which preserves to the states their water allocations and water management systems. A successful program will involve funding as part of a national program for endangered species conservation.

Question 3: Do you believe that "non flow" alternatives can be implemented while continuing to satisfy the ecosystem conservation purposes of the Act? If so, how?

Answer: Yes. Section 3(3) of the Endangered Species Act authorizes the use of "all activities associated with scientific resource management." Work with game fish throughout the west has demonstrated that hatchery and stocking programs are successful in nurturing viable populations of reproducing fish where populations have been reduced or do not exist. The Colorado and Platte river systems have been substantially modified by an historic state/federal partnership in the field of water conservation and use. We must continue to deal with managing a changed, and changing, ecosystem if we are to be successful in recovering the species.

In the Colorado River Basin, the problem of competition for habitat and predation by game fish must be squarely addressed. Federal and state programs which have favored cold water game fish over the warm water native fish need to be reexamined. Personnel in the Fish and Wildlife Service should be charged specifically with designing a program which 1) accepts full development of each state's

compact allocations under the water management system of each state, 2) defines stream reaches which are critical to the fishes, 3) gives a priority to native fishes in those reaches, 4) utilizes all scientific management techniques, including hatchery and stocking programs, to ensure a reproducing native fish population with the water available under compact delivery requirements.

In the Platte River Basin, the whooping crane habitat can be maintained through mechanical means to remove the trees and woody undergrowth which the crane avoid. No amount of water will "scrub" out the cottonwood which have grown up in the Platte River channel. "Ecosystem conservation" for the crane necessarily involves intensive manipulation and change from the current environment of the river, which promotes vegetative growth because of the year-round availability of water due to reservoir releases and return flows. Unfortunately, crane shun areas of vegetative growth which humans consider attractive. Historically, the Platte River channel often went bone dry in central Nebraska, impeding the growth of water-loving trees, such as cottonwood.

Question 4: Do you believe that the minimum flows required by interstate compacts are adequate to maintain populations of endangered fish? What data do you have to support your conclusion?

Answer: It is a fact in the Colorado River Basin that game fish are thriving and will continue to thrive on the flows which are available under the 1922 Colorado River Compact. The real issue on the Colorado River is not flow, but rather, temperature changes, competition by predator game fish which have been introduced by federal and state game agencies, and barriers to migration caused by some large federal dams. There is no data to show that flow depletions, as such, are the cause of the decline of the native fishes. Historically, the Colorado River Basin experienced large flow fluctuations, flood and drought cycles, which constantly changed the contour of the river and rearranged the habitat of the native fishes. The native fish successfully adapted to a changing river. Storage projects and return flows from upstream uses actually work to stabilize and reregulate the Colorado River to provide more dependable flows than would exist under purely natural conditions.

The same is true of the Platte, which was often bone dry in central Nebraska during the summer months. Now a perennial flow exists in the Platte. The Platte River Trust has demonstrated that a mechanical clearing program can accommodate varying flows, whether those flows are reduced naturally by drought or through upstream storage. Given the

extensive system of federal and state law which apportions and governs water use on the river, the job of fish and wildlife managers is to design and implement a program which meets two great national goals: conservation of endangered species and conservation and use of water resources.

Question 5: You have attributed the depletion of endangered fish populations to problems other than diminished flows (e.g. rotenone, exotic fish, etc.). Do you believe these problems can be mitigated so as to reduce the conflicts associated with stream flow? If so, how?

Answer: Yes. Remaining critical reaches of the Colorado River should be identified where it is feasible to preserve or enhance the warm water conditions which favor the native fishes. The feasibility of modifying cold water releases from federal reservoirs, if any, which adversely affect these reaches, should be examined. New structures which could block necessary migration of native fish during critical life stages in necessary habitat reaches, should be designed to accommodate the native fishes. Federal and state game fish programs should be modified, as required, to give priority to native fish in the critical habitat reaches which are identified. Poisoning of river reaches by the fish and game agencies should not be repeated. A native fish-rearing and hatchery program should be maintained.

Question 6: Do state laws prevent or inhibit the purchase of water rights in the Upper Colorado River System? If so, can the inhibiting factors be mitigated or eliminated?

Answer: In Colorado, water rights are freely transferable through sale and purchase, so long as the change does not materially injure other water rights. Successful purchase and conversion of water rights from consumptive to instream uses has occurred in Colorado. The Colorado Water Conservation Board may appropriate water for maintenance of stream flow conditions for preservation of the natural environment to a reasonable degree and has done so for nearly 5,000 miles of streams in Colorado.

Section 5 of the Endangered Species Act authorizes the Secretary of Interior to purchase water for conservation of threatened or endangered species. In my professional opinion, this section defines, by operation of federal law, a beneficial use which states must recognize when the Secretary proceeds under authority of section 5 of the Endangered Species Act.

In states like Colorado, the Secretary can work through the state agency which is authorized to maintain an

instream flow program. Where such a mechanism does not exist and if the United States cannot get recognition of the endangered species uses by state administrative agencies, the United States may choose to insist on recognition of the beneficial use and water acquisition authority given to the Secretary under section 5 of the Act, including the filing of legal actions in state court under the McCarran Amendment, or in federal court when the United States has not been joined in water adjudications under the McCarran Amendment.

Question 7: Mr. Hobbs testified that the Colorado Water Congress would like to see the consultation process evolve to the point where it was not addressing individual projects on a case-by-case basis. Please explain how this process would work and how you feel such a consultation would satisfy the mandate under the Act.

Answer: If this is how my testimony was understood, a clarification is needed. A proper recovery plan would remove any lingering concern about flow depletions which occur on a project-by-project basis, since full development of each state's compact entitlements would already be assumed and would be built into the plan. Section 7 consultation would still be required of each water project to be sure that it would not block necessary migration in a critical reach of the river, or radically and deleteriously change temperatures, or destroy spawning areas needed for the survival of the native fishes. In such instances, reasonable and prudent alternatives to jeopardy findings, where jeopardy is shown, would have to be addressed under section 7.

STATEMENT OF THE
ENVIRONMENTAL DEFENSE FUND,
SIERRA CLUB,
FRIENDS OF THE EARTH,
COLORADO TROUT UNLIMITED,
COLORADO AUDUBON COUNCIL,
and
UTAH AUDUBON SOCIETY

BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
OF THE
SENATE COMMITTEE ON ENVIRONMENT
AND PUBLIC WORKS
CONCERNING
REAUTHORIZATION OF THE
ENDANGERED SPECIES ACT

April 16, 1985

Presented by:
James B. Martin
Environmental Defense Fund
Rocky Mountain Office

Mr. Chairman and members of the subcommittee, I would like to thank you for this opportunity to testify on behalf of the Environmental Defense Fund, the Southwest Regional Office of the Sierra Club, Friends of the Earth, Colorado Trout Unlimited, Colorado Audubon Council, and Utah Audubon Society. As an initial matter, I want to emphasize that we have coordinated with other conservation organizations in drafting this testimony. While we have confined our statement to issues surrounding preservation of three Colorado River fish species that are threatened with extinction, we share with other conservation organizations a fundamental commitment to reauthorization of the Endangered Species Act for five years. That Act is a crucial element of this nation's commitment to preserve for future generations a full legacy of the diverse species of plants and animals that inhabit this Earth, and its reauthorization is of the utmost importance.

I. Introduction

Our immediate concern is preventing the extinction of three endangered fish species that are uniquely adapted to the environmental conditions of the Colorado River. We are convinced that the Endangered Species Act, in its present form, offers the means to achieve that goal, and even to recover these species. But conscientious implementation of the Act, particularly sections 5 and 7, is essential if efforts to preserve these species are to succeed. Unfortunately, the Fish and Wildlife Service has not done the job needed to ensure preservation of the species.

Since March 1981, the Fish and Wildlife Service has pursued a policy of issuing biological opinions approving water develop-

ment projects even though, in many cases, the Service could not meaningfully measure either the project's impact on the species or the effectiveness of measures proposed to offset the project impacts. That policy sanctioned continued degradation of the ecosystem upon which the endangered fish species depend for their continued existence and has resulted in a continued decline of the species. That policy has been especially damaging in the face of pressure from the Bureau of Reclamation to complete consultations for projects that will further increase depletions of water from streams that provide habitat for endangered fish species.

We are encouraged by informal statements that the Service has, in the last few weeks, abandoned its policy of granting nonjeopardy opinions that effectively resolve scientific uncertainty in favor of development. We hope that this action signals a willingness to work with all affected interests to fashion a biologically responsible conservation plan that assures recovery of these species while also minimizing the Act's purported interference with state water rights systems. We are convinced that such a solution can be devised, so long as the federal agencies adhere to their duty to give first priority to species preservation.

II. Status of the Colorado River System's Endangered Fish Species

There is no question but that the listed fish species of the Colorado River are threatened with extinction. Dam construction, water depletions, and other water development projects have profoundly altered flow patterns, water quantity and quality, and river channel characteristics since the early 1900s. Over the same period of time, populations of these endangered fish species have declined dramatically. At best, these species are being maintained at seriously reduced population levels that may be dangerously close to the point of extinction. At worst, we have not even halted the species' population decline.

The Colorado squawfish is now found in only twenty-five percent of the habitat it historically occupied. Over the past twenty years, according to the Fish and Wildlife Service, there has been a sixty-to-seventy percent decline in juvenile and adult squawfish and a ninety-four percent decline in young-of-the-year. The situation for the other two listed species is even more grave. The humpback chub is now believed to occupy the few remaining suitable areas where self-sustaining populations can be maintained; protection of those essential habitat areas is critical to survival of this species in its natural habitat. And the bonytail chub, once the most abundant species in the mainstem Colorado and Green Rivers, is now the rarest of the Colorado River system's native fish species. One prominent authority has likened the decline of the bonytail chub to that of the passenger pigeon.

III. Action Is Needed to Conserve the Colorado River System's Endangered Fish Species

Our first priority must be to assure the conservation of these endangered species, and the natural ecosystems upon which they depend. It is important to bear in mind, however, that while development of the Colorado River is constrained by the need to conserve endangered species, other values must also be considered in fashioning a program that assures protection for listed species while permitting further development of the river system. For example, the riverine habitat of the upper Colorado River is used extensively by raptors such as the endangered bald eagle and by other water dependent birds such as the great blue heron. On the other hand, people travel from all parts of the country to raft, fish, and boat on the Colorado River. The Colorado River system truly is the lifeblood of the arid Southwest and protection of this resource is very important to us and our members, as well as to the public at large.

But as we stated, the first priority must be preservation and recovery of the river system's endangered fish species. The Fish and Wildlife Service concedes, as it must, that habitat protection and maintenance of stream flows are essential for preservation of these species. However, the Fish and Wildlife Service has pursued a policy, known as the "Windy Gap" approach, of granting favorable biological opinions to all project applicants, conditioned only upon the project sponsor's contribution to research, monitoring, and in some cases, future construction of artificial devices such as fish ladders. More precisely, since

1981 the Service has completed thirty-three consultations using the Windy Gap approach, totaling over 400,000 acre-feet in depletions. Yet the "reasonable and prudent alternatives" identified by the Fish and Wildlife Service have amounted to little more than research, studies, and field monitoring. The bottom line is that this policy did not contribute to recovery of these species and very well may have permitted a further decline in their abundance.

We have been told informally that the Service recently abandoned the Windy Gap approach for section 7 consultations. We would view that as a positive development, since it offers a much-needed opportunity to step back and to fashion a fresh approach to addressing the controversial problem of preserving the river system's endangered fishes. As we see it, the Service and other agencies must now take two essential steps.

First, the Service must systematically assess the impacts of new water projects on the survival and recovery of the endangered fish species. If the Service determines that a project is likely to jeopardize the continued existence of a species, or if the Service lacks the information to make a reasoned and informed decision, then it must refuse to issue a nonjeopardy opinion, as it did prior to 1981 when the Windy Gap approach was first used.

Second, the solution to the Colorado River basin problem must begin with development of a comprehensive conservation plan for restoration of the species. Such a plan is necessary because the Service can only evaluate the impacts of individual water projects, and the cumulative impacts of multiple projects, after it has developed a broad understanding of how the river system

works. Once such a plan is in place, we will know how to protect the fish species, but we also will know how water needs can be met. We urge the Service and other agencies, state and federal, to join with us in formulating such a plan for these endangered fishes.

One forum that offers potential for encouraging the development of a conservation plan is the Upper Colorado River Basin Coordinating Committee. Attached to these comments is a letter to the executive director of the Colorado Department of Natural Resources, who is a member of the Coordinating Committee, from a number of local, regional, and national conservation organizations. In that letter we described in some detail the essential elements of a conservation plan, but also identified several obstacles that must be overcome if the Committee is to successfully complete a biologically sound conservation plan.

As this letter illustrates, we are looking carefully at feasible fish conservation measures. We also are prepared to examine strategies for minimizing interference with state water rights systems. However, we have several observations on the ingredients for a solution to this resource allocation conflict.

First, any conservation plan must recognize the basic biological fact that preservation of naturally sustaining populations of these fish species depends on preservation of essential habitat and flow conditions. The most recent draft revision of the recovery plan for the Colorado squawfish reflects this fact. The draft plan (developed by the Fish and Wildlife Service) states, for example, that recovery of the squawfish will

depend on protection of essential habitat areas on the Green and Colorado Rivers and on the Yampa and White Rivers as well. In addition, the draft revision calls for legal protection for the flow conditions and water quality parameters that are integrally tied to the species' life cycle requirements. Conversely, reliance on artificial measures such as hatcheries and spawning channels would not only be imprudent but would be inconsistent with the Act's goal of protecting the ecosystems upon which threatened and endangered species depend.

The provisions offered by the Service in their draft revisions to the recovery plans, and everything else we know about these endangered fish species' life histories, indicate clearly that any biologically defensible conservation plan must, over the long term, assure the flow conditions that are indispensable to the species' survival. Of course, that implies a careful balancing of conservation measures with state water rights systems. That leads to our second observation.

The controversy in the Rocky Mountain region over implementation of the Endangered Species Act often has centered on its potential interference with state water rights systems. We are sensitive to these concerns, but we must point out that maintenance of instream flows, even the minimum amounts necessary to avoid species extinction or to promote other conservation objectives, is not regarded as a beneficial use under many state water rights systems. For example, in the State of Colorado, diversion of water from the streambed is an essential element of most appropriative water rights. Thus, under existing state law private parties are foreclosed from purchasing water rights and dedicating

them to preservation of instream uses. The Colorado Water Conservation Board, a state agency, can make an instream appropriation only if the environment to be preserved can exist without material injury to water rights.

Water rights systems such as these have substantially contributed to the current plight of the river basin's endangered fish species. Moreover, these statutory schemes could seriously impede development of creative mechanisms for minimizing conflict between the Endangered Species Act's prescriptions and water development. Some western states have begun the process of reforming their state water rights systems to provide at least some opportunity for protection of instream values dependent upon flowing water. We believe that to the extent the water development community desires to reduce the Act's potential for interference with state water rights systems, we must, as a corollary, focus on modifications of state water rights systems. For example, instream flow rights should be defined as property rights that can be acquired and held in perpetuity by private organizations such as the Nature Conservancy.

Absent such fundamental reforms in state water rights systems, the Endangered Species Act's mandatory provisions will be the only safeguard against species extinction. While this Committee has not identified state water rights systems as a subject for its review in considering reauthorization of the Act, we hope the Committee will add its voice to those of us who are calling for such an inquiry.

Finally, the Upper Colorado River Basin Coordinating Committee

should be urged to consider, in the specific context of the Colorado River basin, the lessons we have learned about waste of our water resources. For example, irrigation withdrawals account for nearly eighty-three percent of the nation's total water consumption. Yet "nearly one-fourth of the streamflow withdrawn by a typical irrigator fails to reach the farm boundary [because of conveyance losses], while only fifty-three percent of the remainder is actually used by the crops." That means that more than one-half the water diverted by the average western farmer constitutes physical waste.

State appropriative water rights systems tend to discourage water conservation and efficient resource allocation. Nevertheless, the benefits of increasing the available water supply through conservation are obvious. A concentrated effort to attack the legal and institutional barriers to water conservation might well reduce or eliminate the tension between preservation of instream flows for endangered species and future water development. Therefore, this alternative deserves the Coordinating Committee's thorough examination.

Submitted By:

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ENVIRONMENTAL DEFENSE FUND

April 10, 1985

Mr. David Getches
Executive Director
Department of Natural Resources
1313 Sherman Street, Room 718
Denver, Colorado 80203

Re: Upper Colorado River Basin
Coordinating Committee

Dear Mr. Getches:

In recent hearings before the House Subcommittee on Fisheries, Wildlife Conservation and the Environment, the U.S. Department of the Interior recommended that the Endangered Species Act be reauthorized for four years without substantive amendments. The Department of Commerce made the same recommendation. And a number of local and national conservation organizations recommended that the Act be reauthorized for five years. Thus, we are hopeful that Congress will act quickly to reauthorize this vital piece of legislation.

Nevertheless, despite the efforts of state and federal fish and wildlife agencies, the endangered fish species of the Colorado River basin continue to decline. It is abundantly clear that development and implementation of a comprehensive conservation plan is urgently needed if we are to avoid the extinction of these species. The Upper Colorado River Coordinating Committee could play a vital role in bringing all interested parties together to formulate a biologically responsible plan that reconciles protection of the natural habitat upon which these endangered fish species depend with future development of the basin's water resources.

However, in observing the Committee's deliberations we have identified several issues that could seriously obstruct the search for such a solution. First, it appears that in examining the effects of additional depletions on flow regimes, the hydrology subcommittee failed to evaluate the effects of all depletions predicted in the completed and pending section 7 consultations.

We believe that an understanding of the effects of those planned depletions is vital to development of a meaningful conservation plan. We hope you will use your good offices to assure that such an analysis is undertaken.

Second, we are concerned that the Bureau of Reclamation, which is a Committee member, is insisting upon completion of the section 7 consultation for a second round of water sales from Ruedi Reservoir before the Committee has had an opportunity to fashion a comprehensive conservation plan. Since water sales from Ruedi will further limit the agencies' flexibility in fashioning a comprehensive conservation plan, we believe the Bureau should have refrained from pressuring the Fish and Wildlife Service to complete the section 7 consultation on this project until the Committee has completed its deliberations. At a minimum, the Bureau should have discussed this issue fully with the Coordinating Committee. We hope that the Bureau's action will be a topic of discussion at the Committee's next meeting.

Finally, in the spirit of the Committee's search for a comprehensive conservation plan, we have identified the key principles upon which such a plan should be based. In a like vein, we intend to suggest that the Committee consider, as part of its deliberations, the adequacy of state water rights systems to foster innovative approaches to accommodating the needs of the fishes with water development.

1. Technical Analyses Needed to Carry Out Meaningful Section 7 Consultations

The Committee is charged not only with development of a comprehensive, long-range plan for recovery of the species, but also must examine strategies for responding to consultations initiated pursuant to section 7 of the Endangered Species Act. The approach used in the section 7 consultations is of special concern to us because of the depressed status of the listed species and the manifold threats to their continued existence.

In preparing a biological opinion, the Fish and Wildlife Service must, of course, assume that the depletions and other physical changes predicted in a permit application will in fact take place, just as the agency has no choice but to assume that depletions reviewed in previous consultations will occur. As a result, we had expected that in assessing the effect of future depletions on the system's hydrologic regime the hydrology subcommittee would examine the effects of the depletions envisioned by the pending and previously completed consultations. (We understand that since 1977, the Fish and Wildlife Service has completed at least seventy-eight consultations on water-related

projects in the basin, encompassing over one million acre-feet in depletions.)

We were disturbed to find, however, that the subcommittee's assessment of the effects of future depletions on the river system's flow regime did not account for the depletions that would take place upon completion of the projects for which section 7 consultations are pending or recently have been completed. Instead, the subcommittee apparently made a political judgment of which projects are likely to be operating within fifteen to twenty years, and considered only those projects. Thus, the subcommittee's conclusion that "changes in the flow regime between now and the year 2000 will be small and insignificant" is irrelevant to examination, in the context of a section 7 consultation, of a specific water project's impacts on the fish species.

The Fish and Wildlife Service can not, in carrying out its responsibilities under the Act, weigh the likelihood of a project's actual use of water. Instead, the agency must examine the potential effects of water development projects on the species' habitat requirements and must, on that basis, determine whether a proposed action is likely to jeopardize the continued existence of the species. If the answer is in the affirmative, the Service must issue a jeopardy opinion.

While a judgment about the future may be a valid element of an effort to fashion a long-term recovery strategy, it clearly has no place in an ongoing series of section 7 consultations. Indeed, permitting the Service to engage in such speculation would be tantamount to gambling with the extinction of the endangered fishes of the Colorado River.

* If jeopardy is found, the Service is to suggest those reasonable and prudent alternatives that could be taken by the applicant to avoid the jeopardy finding. The Service also has the flexibility to issue nonjeopardy opinions that permit reinitiation of consultation if new information suggests that endangered species might be threatened. Such an alternative could be particularly useful for multistage projects and in cases where actual development will not occur for a number of years after consultation is initiated. Long lag times between consultation and development has been an especially prevalent problem on the Colorado River. It is highly likely that biological and hydrological conditions will change over a period of decades. Issuance of biological opinions conditioned upon reinitiation of consultation once a project becomes a reality may represent a reasonable response to the uncertainty that surrounds projects of this kind. Nevertheless, the threshold inquiry is, and must continue to be, whether a proposed project will jeopardize the continued existence of the endangered fish species.

We are convinced that the hydrology subcommittee's assignments should be designed to assist the Coordinating Committee in the execution of both its short-term and longer-term duties. Thus, we strongly urge that at its next meeting the Coordinating Committee request the subcommittee to assess the impacts on the system's flow regime of the depletions encompassed by all pending consultations as well as those already completed. The results of that assessment are indispensable to identification of the "baseline" upon which both future consultations and a recovery plan must be founded.

2. Section 7 Consultation for the Second Round of Water Sales from Ruedi Reservoir

What is urgently needed at this time is a pause in the continued issuance of biological opinions that sanction further depletions, until a comprehensive conservation plan can be implemented. This would permit the agencies' biologists to gather the data that are needed to fully evaluate the effects of specific projects on the endangered fish species and the effectiveness of measures for offsetting those impacts. At the same time, the policymakers would have an unhindered opportunity to deliberately weigh alternative conservation strategies.

In our view federal agencies have a special responsibility in this regard, for two reasons. First, federal agencies have a duty to use their statutory authorities to promote the Act's purposes of conserving endangered species. Second, federal agencies such as the Bureau of Reclamation are represented on the Coordinating Committee and should ensure that their actions do not impede the Committee's ability to fashion a conservation plan.

We fear that the Bureau's insistence upon completion of the section 7 consultation for the second round of water sales from Ruedi reservoir will have precisely that effect. Commitment of that block of water to a consumptive use, no matter how speculative, will limit the Committee's latitude in formulating a conservation plan since the sale reduces still farther the small pool of unappropriated water that remains available for ensuring some level of minimum flows. On the other hand, the Bureau has not demonstrated there is any "need" for the immediate sale of this water. We believe the Bureau should have refrained from pressuring the Fish and Wildlife Service into completing the section 7 consultation, to give all of the affected agencies and the Committee a chance to develop a long-range solution to this problem.

Moreover, we are disturbed that the Bureau is insisting that the Fish and Wildlife Service complete the section 7 consultation without discussing this issue fully with the Committee.

We urge you to place this topic on the Committee's agenda for its next meeting.

3. Principles for a Long-Range Conservation Plan

Beyond addressing the immediate concerns of gathering and evaluating scientific data on the river's endangered fishes, and examining alternative strategies for section 7 consultations, the Coordinating Committee is looking to development of a long-term, comprehensive program for conserving and recovering these species. We believe that expeditious development and implementation of such a plan is critically important, since it seems to be the consensus of biological experts that we have not even arrested the species' decline, and since the Fish and Wildlife Service continues to issue biological opinions that authorize further degradation of essential habitat. In support of this effort to develop a long-term plan for protection of the river's endangered fishes, we have identified certain fundamental principles that should be included in a conservation plan.

The first priority of any conservation plan under the Endangered Species Act must be the conservation of endangered species and the natural ecosystems upon which they depend. Second, it is essential to bear in mind that while development of the Colorado River is constrained by the need to conserve endangered species, other values must also be considered in developing a conservation program under the Act. For example, the riverine habitat is heavily used by raptors such as the endangered bald eagle and by other water dependent birds like the blue heron. Protection of these species, and other values that are integrally dependent upon maintenance of the riverine ecosystem in its natural state, is important to our organizations and our members as well as to the public at large. Thus, development of a plan that assures protection of the river's endangered fishes must also recognize the importance of preserving the natural ecosystem, especially along ecologically sensitive sections of the river.

Third, the conservation plan must, at a minimum, ensure that no species is rendered extinct. Fourth, the plan must be sufficiently dynamic that it would not impede development of measures that would be needed to protect any species that might be listed in the future. Such an action is purely speculative at this time, but that merely points out the need to retain flexibility to respond if the Secretary of the Interior lists other species that are dependent upon the Colorado River for their existence.

Fifth, while the plan's basic objective must be to prevent the extinction of listed species, it must also be designed to bring about the recovery of the species. While it may not be

possible to recover these species to the point where they fully occupy their historic range, the plan should at least recover the species to the point where intensive management is no longer necessary to ensure their survival.

Sixth, the plan should take into account that exotic species in the river system have a detrimental effect on the listed species. Thus, the plan should include measures to prevent the introduction of exotic species into areas where they are not currently found, and should encourage efforts to eliminate exotic species in cases where that is feasible and does not conflict irreconcilably with other public policies.

Seventh, artificial measures may be useful but only as part of a larger, comprehensive effort to recover the fish species. The proponents of such measures should bear the burden of proof. Before its adoption, an artificial measure must be demonstrated to (a) appreciably contribute to efforts to prevent the extinction of one or more species; (b) not lead to significant genetic changes in the stocks; and (c) be a temporary measure that will restore the species to a condition where active human intervention and the continued investment of public resources are no longer necessary. Moreover, as the plan's reliance on artificial measures increases relative to measures designed to protect the listed species' ecosystem, the proponents of artificial measures should bear an increasingly stringent burden of proving that such measures will contribute to the species' long-term survival.

Eighth, timing is an important issue. It is essential that any measures (e.g., hatcheries, withholding water in federal reservoirs, operational changes in Flaming Gorge) be in place before the actions that those measures are designed to mitigate occur.

4. The Committee Should Examine How Changes to State Water Rights Systems Would Enhance Protection of Endangered Species and Other Instream Values

A final matter deserves your attention. As you know, maintaining instream flows, even the minimum amounts necessary to avoid species extinction or to promote other conservation objectives, has not traditionally been considered--and in many western states today is still not considered--a beneficial use legally protectable under state law. As a result, these water rights systems are, in substantial part, responsible for the current plight of the river basin's endangered fish species. Thus, we believe the Coordinating Committee must include in its discussions a consideration of possible changes in state water law as well as changes it apparently intends to consider in federal law.

Such a review is especially appropriate in this context. One of the Act's more controversial features in this region has been its purported interference with expectations created under state water rights systems. To the extent that the Coordinating Committee members desire to minimize the potential for such conflicts, it is necessary to examine how state water rights systems could be modified to protect instream values.

A number of western states have very recently begun the process of reforming their water law systems to provide at least some opportunity for protection of environmental values dependent upon flowing water. These recent reforms provide a useful starting place for identifying the types of changes that should be considered. These include, among others, the recognition of instream flows as beneficial uses, the establishment of private rights to purchase and hold instream flow appropriations, establishment of minimum flow programs, and the enactment of laws regulating riparian development.

Without a careful examination of approaches such as these, we believe the Committee will have overlooked a potentially important component of a comprehensive plan for the future of the river and its resources. Thus, we intend to recommend that the Committee consider revisions to state water laws as a corollary to consideration of changes to federal law.

In closing, we want to reiterate our commitment to formulating a long-range plan for protecting the endangered living resources of the Colorado River, while assuring the optimum utilization of its water resources. We would be happy to discuss these ideas with you.

Respectfully,


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STATEMENT OF THE
NATIONAL WILDLIFE FEDERATION
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL
POLLUTION
OF THE
SENATE COMMITTEE ON
ENVIRONMENT AND
PUBLIC WORKS
ON
THE ENDANGERED SPECIES ACT
S. 725

April 16, 1985

Submitted by:

Dr. Robert P. Davison
Fisheries and Wildlife Division
National Wildlife Federation

On behalf of the National Wildlife Federation (NWF), I appreciate this opportunity to submit the following statement on the Endangered Species Act of 1973, as amended (ESA).

The NWF is the world's largest conservation-education organization. We have over 4.5 million members and supporters throughout the U.S. and affiliated organizations in every state, the Virgin Islands and Puerto Rico. Since the formation of the NWF in 1936, our members, affiliated organizations and staff have supported and worked aggressively for protection of endangered and threatened species. In 1956, ten years before enactment of the nation's first endangered species law, the NWF's National Wildlife Week theme was "Save Endangered Species." Since 1970, the NWF has distributed over a million pieces of educational literature on endangered species, and undertaken numerous legislative and legal efforts to protect endangered species. These efforts continue today as we seek reauthorization of a strong ESA.

LONGER REAUTHORIZATIONS
OF THE ESA ARE NEEDED

The current ESA has been the subject of close scrutiny, discussion, and major changes in 1978, 1979, and most recently, 1982. Now, less than 3 years later we are again considering further revisions to the Act. These frequent amendments to the ESA and the corresponding frequent regulatory revisions have hampered effective implementation of the Act, resulting in

instability, uncertainty, inefficiency and misallocation of extremely limited resources within the endangered species program.

Problems with the current frequency of reauthorization of the ESA are best illustrated by the pattern of amendment and promulgation of regulations for Sections 4 and 7 of the ESA. Section 4 and Section 7 regulations for the ESA amendments of 10 November 1978 were not completed until February 1980, two months after additional amendments to these Sections were enacted into law. The U.S. Fish and Wildlife Service (FWS) then had less than 2 years experience in implementing these regulations before Congress again began consideration of even more changes to the ESA. Regulations implementing the Section 10 and Section 4 amendments enacted on 13 October 1982 were made final only 6 months ago (27 August and 1 October 1984, respectively). Moreover, the Section 7 regulations for the 1982 amendments were proposed on 29 June 1983 but have yet to be finished. Thus, although none of the major changes made in 1982 have been fully in place for more than 6 months, some organizations are willing to charge that these improvements to the ESA are not working and that Congress needs to undertake still more revisions. This endless tinkering with the Act has kept the FWS in a perpetual stage of rulemaking, which is not in the interest of endangered species protection or economic development. Additionally, we fail to see how Congress can make sound judgments on alleged problems with the ESA based on never more than 18 months of experience with any given version of the law.

Longer reauthorization periods are essential to allow amendments to be implemented and evaluated adequately. For that reason the NWF strongly urges Congress to extend the ESA for 5 years as provided in S. 725.

FEW CHANGES IN THE
ESA ARE NEEDED

Twelve years of experience with the current ESA has demonstrated that it is fundamentally sound. While some refinements to the ESA are appropriate, those seeking major changes in how the Act works should bear a heavy burden of proof to demonstrate that such changes are necessary.

Compelling evidence has been submitted to this Subcommittee by the Environmental Defense Fund and Natural Resources Defense Council and others to demonstrate the need for additional provisions in the ESA to provide incremental increases in protection for plant and candidate species. Presently, the only prohibition on taking of protected plants is a ban on collecting these species from areas under federal jurisdiction. As such the current ESA does not protect listed plants from many of the common activities that threaten their continued existence. In addition, more than a thousand U.S. plant and animal species have been identified as candidates for listing but because of inadequate funding and staffing more than 25 years will be required just to extend protection to these species already known to be threatened or endangered. Many of these candidate species have suffered serious declines since being identified and cannot wait 25 years to receive some

measure of protection. Therefore, the NWF encourages this Subcommittee to support proposals to help stem the further destruction of threatened and endangered plants and of candidate species known to be imperiled.

The NWF also supports efforts to ban commercial trade in endangered or threatened raptors.

THE FWS IS NOT FULLY IMPLEMENTING
THE ESA

Other relatively noncontroversial amendments to improve the Act may be warranted in addition to those for plants and candidate species. However, the problems thwarting this nation's endangered species efforts do not lie with the ESA, which is well designed to allow economic development consistent with the protection of endangered and threatened species and the ecosystems upon which they depend. The problems lie instead with the limited implementation of the law by the FWS. What is needed is to have the FWS administer the ESA as it is written and as Congress clearly intended.

The most serious factor preventing the FWS from fulfilling its responsibilities under the ESA is the wholly inadequate funding provided to the program over the past 12 years. As indicated above and in other testimony before this Subcommittee, more than a thousand U.S. species are known to be in need of and eligible for listing under the ESA. Yet at current levels of funding and manpower the FWS has managed to list only about 40 species per year since 1973 and fewer than half that since 1981. Moreover, there are more than 2,700

species that may be in need of the protection provided by listing but for which the FWS needs further information to decide whether such action is warranted.

Lack of money and sufficient personnel also have in large part prevented the FWS from making progress toward the goal of the ESA to recover species to the point where they are no longer in need of protection. Providing funds and personnel to aid species to the point where they can be removed from the ESA's list is every bit as important as providing resources to add new species to that list. Present levels of commitment to species recovery have limited FWS efforts largely to high priority actions for 'glamour' species. An effective endangered species program requires support for a balanced effort directed at recovery of all listed species.

Insufficient funding and staffing also place the FWS at a serious disadvantage in meeting its requirements under Section 7 of the Act. For example, in its fiscal year 1986 budget request the Bureau of Reclamation has requested \$500,000 to find a means of changing the current FWS biological opinion, which indicates that the Bureau's Narrows project on the South Platte River in northeastern Colorado will likely jeopardize the survival of the whooping crane. The FWS must participate in this effort but has only \$2.5 million available to meet all of its consultation responsibilities nationwide. This tremendous imbalance in resources threatens to drive the effort on Narrows in a manner that is not consistent with the ESA or the continued survival of the whooping crane.

To ensure that the FWS is able to fulfill its listing, recovery, consultation and enforcement responsibilities under the ESA, the NWF joins Environmental Defense Fund et al. in urging this Subcommittee to increase annual authorizations to roughly \$70 million over the next five years. We ask also that the authorization for the Section 6 cooperative program with the states be increased to \$25 million over the same period.

Section 6 was enacted to encourage the states and the FWS to work together to conserve threatened and endangered species. Through the cooperative agreement provisions of Section 6, Congress intended to vest in state officials much of the responsibility for managing federally-protected species. Furthermore, Congress wanted the valuable personnel resources and expertise of the state game and fish agencies to be utilized in its endangered species program. Unfortunately, Congress has seen fit to spend only about \$30 million over the past 12 years for the implementation of Section 6. It is time to demonstrate a greater commitment to a full partnership with the states by authorizing and appropriating \$25 million.

The second major factor preventing full implementation of the ESA is the increasing reluctance of the FWS to issue jeopardy opinions for projects where required by the Act. This practice is most apparent in the FWS' 'innovative' biological opinions on water projects in the upper Colorado River basin, in which "no jeopardy" opinions are issued allowing projects to proceed in clear contradiction of the ESA's requirements. These so-called 'Windy Gap' opinions and other western water issues are discussed in greater detail below.

THE CONTINUED EXISTENCE OF A NUMBER
OF SPECIES DEPENDS ON ADEQUATE
INSTREAM FLOWS IN WESTERN RIVERS

One of the principal reasons for the near demise of a number of species that depend on aquatic habitats in the West is water development along rivers such as the Colorado and Platte. Relatively obscure species of fish like the humpback chub and Colorado squawfish and more glamorous species of birds such as the whooping crane need properly timed stream flows of sufficient magnitude to maintain their habitat and ensure their survival. This central fact must be kept in mind in any discussion of western water and endangered species issues. There may be legitimate disagreement over the exact magnitude, timing and temperature of water flows for these species, but there can be no legitimate disagreement that such requirements exist.

Construction of dams to divert water for agricultural, industrial or municipal purposes or to generate electricity has turned many turbulent western rivers with tremendous fluctuations in stream flows into a series of large lakes from which consistently cold water is released in relatively constant flows year around. These changes and reductions in river flows have made much habitat so unsuitable for some wildlife species that they are now in danger of becoming extinct because they are unable to adapt to the new flow and temperature regimes.

THE PLATTE RIVER SYSTEM

Consider the endangered whooping crane, the piping plover and interior least tern (both proposed for listing), which rely in part on the habitat of Nebraska's Platte River. Only one wild breeding population of whooping cranes exists in the world. Numbering some 84 birds in 1984 this flock constitutes three-fourths of all whooping cranes left in existence -- the remaining birds are captive or nonbreeding. Although at one time the population may have been as high as 1500 birds the whooping crane all but disappeared in the 1940's. The decline resulted from human activity, especially the destruction of habitat for economic development. Nonetheless, an intensive scientific and protective effort by the governments of the United States and Canada has rescued the whooper from the brink of extinction, at least for the time being. However, the government's substantial investment in the whooper's continued existence is not yet safe. The FWS estimates that at least 40 nesting pairs (requiring a migratory population of 200 birds) must make the trip from the Texas Gulf Coast to Canada each year before the species can be reclassified as "threatened" instead of "endangered."

According to the FWS, an "essential step" in achieving this recovery is preservation of Nebraska's Platte River valley, lying along the whoopers' 2400-mile migratory route. Providing an abundance of food and roosting sites, this area is so vital as a stopping-off point during the migration that FWS has exercised its authority under the Endangered Species Act to

declare a 53-mile stretch of the river to be habitat "critical" to the cranes' survival.

During the long migration whoopers seek out open spaces free of high vegetation apparently in order to escape predators. This is one reason the Platte is so important to the cranes. Historically the wet meadows and wide, shallow riverbed of the Platte have provided excellent roosting and feeding sites for the cranes because spring floods regularly scoured the Platte's sandbars and prevented tall-growing vegetation and trees from taking root in the river channel.

However, the Platte River habitat has declined dramatically in this century. During the past 50 years, water development has reduced average annual flows in the Platte River from 4,000 cubic feet per second (cfs) to roughly 1,000 cfs. Over the same period annual peak flows have been cut approximately 70 percent. This tremendous loss of water flows has narrowed the river channel in the area of critical whooping crane habitat by as much as 90 percent. Sandbars, maintained and created by high spring river flows, once were used by whooping cranes for feeding and resting on their long migration from Canada to the Texas coast. Nesting piping plovers and interior least terns used the same sandbars. Now, many of these sandbars are no longer scoured by the river's water and they have become choked with woody vegetation. At the same time the formation of new sandbars has slowed greatly. In the reach of the Platte River just above the whooping crane's critical habitat, river flows have been reduced by 65-85

percent and the area is no longer used by whooping or sandhill cranes for roosting sites.

As a result, migrating whooping cranes and nonendangered sandhill cranes have been driven to roost in the nearby Rainwater Basin -- habitat which also largely has been destroyed. The cranes have thus been crowded into steadily diminishing habitat. Overcrowded habitat in the Basin has led to two outbreaks of avian cholera with resulting large die-offs of sandhills. Although whooping cranes were not affected by the disease, they were present and a mass mortality of whoopers could have occurred easily. Depleted Platte River flows and increased vegetation create the spectre that the last viable wild whooping crane population could disappear in an avian cholera outbreak. The entire species would then exist only as a remnant population largely in captivity. At the very least, this loss of migratory resting habitat is affecting the reproductive capacity of the whooping cranes.

Because there is little question of the need to maintain river flows in the area of the Platte River used by whooping cranes, the FWS has consistently issued "jeopardy" opinions for projects such as Wildcat Reservoir and the Narrows Unit that deplete these flows. Although FWS provided these projects with reasonable and prudent alternatives, those means of avoiding harm to the whooping crane have not been adopted.

The Narrows Unit on the South Platte River in Colorado would result in a net annual depletion in Platte River flows of 91,900 acre-feet (about 11 percent of the net annual river flow) at Overton, Nebraska in the area used by whooping

cranes. Unlike the approach taken on the upper Colorado River basin since 1981, the FWS issued Narrows a jeopardy opinion with reasonable and prudent alternatives which specified the timing and magnitude of water releases needed to maintain adequate flows. Shortly after the opinion was issued, the FWS, BuRec and the states undertook a cooperative effort aimed at developing a fish and wildlife management plan for the Platte River system in central Nebraska and evaluating alternatives to prevent jeopardy to the whooping crane from the Narrows Unit. A final plan is expected in 1986.

Wildcat Reservoir is a stark example of a project sponsor's unwillingness to avoid harming endangered species no matter how reasonable the effort required.

Riverside Irrigation District and Public Service Company of Colorado (Riverside) proposed to construct a dam and reservoir on Wildcat Creek, a tributary of the South Platte and Platte Rivers in northeastern Colorado. Riverside sought to proceed with construction under a Section 404 general permit which exempts certain activities, arguably including Riverside's proposed dam, from the requirement of an individual permit, subject to a number of conditions. One of these conditions precludes the occurrence of activities under a general permit if the activity may affect an endangered species. While considering whether Riverside qualified to proceed under a general permit, the Army Corps of Engineers (Corps) consulted with the FWS as required by the ESA. The consultation on the Riverside dam resulted in a 1979 biological opinion by the FWS which stated that water depletion by the

project would jeopardize the endangered whooping crane. A subsequent opinion in 1982 confirmed the earlier determination. Based on the FWS' biological opinions, the Corps informed Riverside that the dam could not be built under a general permit and that an individual 404 permit would be required. However, the FWS' second biological opinion proposed two mitigation measures that would eliminate the threat posed by Riverside to the whoopers. These measures were that Riverside could provide 1100 cfs of water in the critical Platte habitat in the spring and fall or maintain a strip of the river channel 500 feet wide and 1.7 miles long (102 acres) free of vegetation. At Riverside's request, FWS calculated that maintaining 102 acres of Platte River habitat in perpetuity would cost \$193,000. In Riverside's estimate, the cost of mitigation equals approximately two-thirds of one percent (0.67%) of the total project cost and less than the cost of one month's delay. Rather than accept either reasonable and prudent alternative or apply for an exemption, Riverside elected to pursue litigation and to commit Colorado electric rate payers to monthly delay costs of hundreds of thousands of dollars.

On March 26, 1985 the Tenth Circuit Court of appeals affirmed the trial judge's decision. The appeals court ruled that the Corps of Engineers is bound by the ESA and the Clean Water Act to consider downstream effects of an impoundment and diversion on the endangered whooping crane and its critical habitat. The court thoroughly rejected the notion that the

project is exempt from the ESA simply because it involves the exercise of state-created water rights.

THE COLORADO RIVER SYSTEM

Four species of fish native to the Colorado River system, the humpback chub, bonytail chub, Colorado squawfish and razorback sucker are near extinction. Development of water-related projects in the river system is contributing directly to the decline of these four endangered fish species. As increasing volumes of water from the river are diverted, stored or consumed, there has been and continues to be a concomitant decline in the amount, variety, and quality of habitat available for the endangered fishes. This habitat decline, in turn, leads to increased competition for food, greater vulnerability to predators, greater likelihood for disease outbreaks and die-offs, and reduced reproductive success.

Little natural riverine habitat remains in the lower basin of the Colorado River system. Construction of 17 dams plus other major diversion projects between 1909 and 1966 -- before enactment of the ESA -- depleted most of the available water in the lower basin (only 4 percent of the flow from the upper basin remains unappropriated), eliminated the Colorado squawfish, and destroyed historic habitat for the humpback and bonytail chub. Only one population of the humpback chub now exists, at the mouth of the Little Colorado River. What may be the nation's last remaining bonytail chub population is found in Lake Mojave. It is old, non-reproducing, and being

supplemented by hatchery-reared fish. The status of these fish in the lower basin of the Colorado River is a dramatic example of the impact of uncontrolled water development on endangered species.

Major water development in the upper basin of the Colorado River began in 1952 and continued with project construction under the Colorado River Storage Project Act in the early 1960's. Nine major dams and other water diversions reduced water flows 35 percent -- 3.9 million acre-feet, of an estimated 10-year average annual total river flow of 11 million acre-feet. Within 10 years less than 20 percent of the 5.5 million acre-feet of water available for appropriation in the upper basin will be left. Here, as in the Colorado River's lower basin, water development has altered the natural riverine habitat by reducing spawning and rearing areas, altering river channel characteristics, affecting water temperature, salinity, and turbidity, and obstructing migrational habits of the endangered fish. The decline in the abundance and distribution of the endangered fish in the upper basin has been documented since the development of Flaming Gorge reservoir and other large water development projects in the early 1960's. Fifty percent of the upper basin habitat for the Colorado squawfish, which was once abundant enough to be harvested commercially, has been lost. A mere 25 percent of the endangered fish's original 2,500 miles of riverine habitat in the upper and lower basins remains. Only two populations of humpback chub exist in the upper basin's deepwater canyons below Grand Junction.

Originally, the bonytail chub was found in the large river environments of the Colorado River basin from Mexico to Wyoming. It is reported to have been probably the most abundant species in the main river channels of the Colorado and Green Rivers.^{1/} The bonytail chub was still common in the Green River as late as 1963, before completion of Flaming Gorge Reservoir. Now there are no known populations of this species in the upper Colorado River basin. According to Behnke and Benson "If it were not for the stark example provided by the passenger pigeon, such a rapid disappearance of a species once so abundant would be almost beyond belief" (emphasis added).

INEXPLICABLE SHIFTS IN FWS' APPROACH TO WATER DEVELOPMENT ON THE COLORADO RIVER

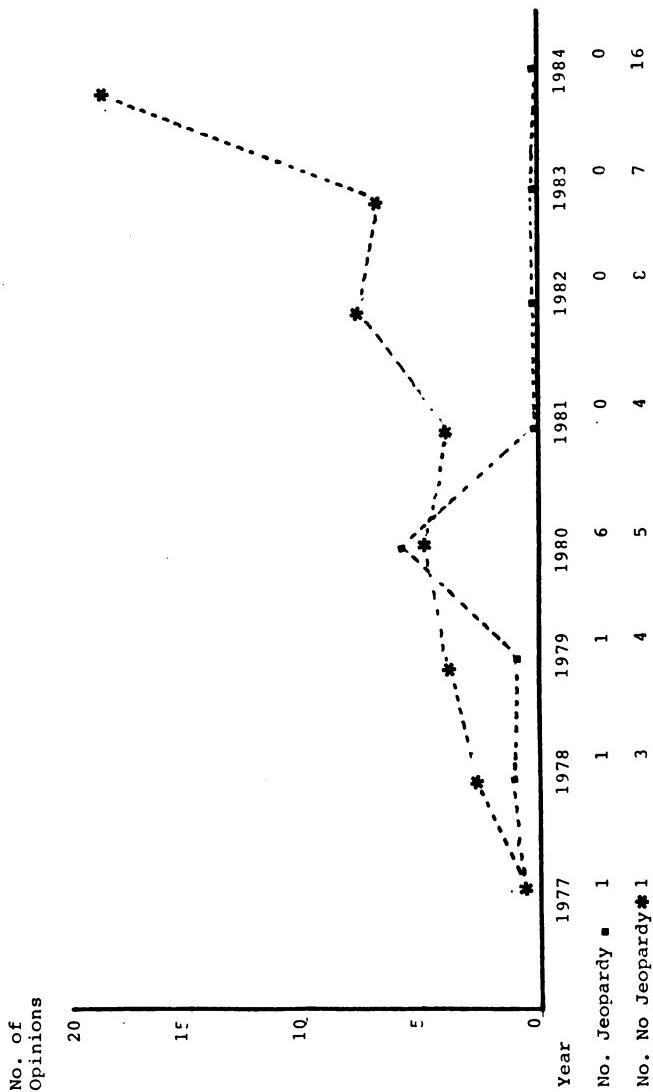
Unlike their efforts on the Platte River system, the FWS has taken at least two inconsistent approaches to water development in the upper basin of the Colorado River and now appears to be on the verge of a third. The dramatic shifts in policy have been abandonment of jeopardy opinions and attempts to prevent further net water depletions (Figure 1). Of the 57 water-depleting projects identified by NWF in that basin which received biological opinions from the FWS since 1977, only 9 were found to have jeopardized the three endangered fishes. All nine jeopardy opinions concluded that unless the water

^{1/}Behnke, R. J. and D. E. Benson, 1982. Endangered and threatened fishes of the upper Colorado River basin. Cooperative Extension Service, Colorado State University, Fort Collins. 38 pp.

Figure 1

NUMBER OF 'JEOPARDY' AND 'NO JEOPARDY' OPINIONS FOR WATER PROJECTS IN THE

UPPER COLORADO RIVER BASIN 1977 - 1984



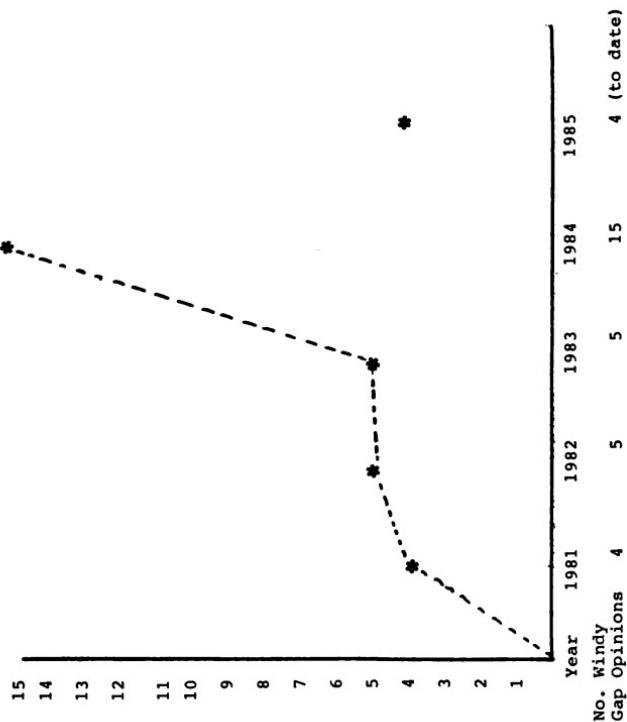
depletions due to the projects were offset to prevent reductions in river flows, these 9 projects would individually and/or cumulatively jeopardize the fishes. For instance, in 1980 the FWS concluded that "the Dolores Project, along with the cumulative impact from related Colorado River Storage Projects currently in operation and others that have been approved for operation after Endangered Species Act reviews, is likely to jeopardize the continued existence of the Colorado squawfish, bonytail chub, and humpback chub." The FWS also stated that it is "important not to reduce present flows until we obtain sufficient biological data that insures any reductions would not be harmful." (Emphasis added.)

In 1981, however, the FWS changed its position on the importance of maintaining river flows in the upper Colorado River basin until there were data sufficient to insure that water depletions would not be harmful. Beginning with the Windy Gap Project on the Colorado River in north central Colorado and in stark contrast to the approach on the Platte River, the FWS adopted a new position that allowed the project to be built even though its water diversions would reduce river flows. Thus, although the FWS stated that "Conclusions drawn from biological studies of the endangered fishes show a close relationship between the precarious situation of the fish and decreasing flows in the basin," FWS nevertheless concluded that operation of the Windy Gap Project would not jeopardize the three endangered species provided certain conservation and recovery measures were carried out. Among these measures was provision of sufficient funds for a 3-year study "to evaluate

habitat improvement techniques for the endangered fish species and to continue collection of physical data needed to assess the impacts of water depletions, sedimentation, and water quality changes on the life cycles of the fishes (emphasis added)." Without knowing the effect of water depletions on the endangered fishes the Windy Gap project was allowed to proceed with an average annual diversion rate of 57,300 acre-feet and a maximum diversion of 93,000 acre-feet in any one year. The project, in fact, was constructed before the completion of the three-year study. Thus, the FWS may have put itself in the position of being unable to alter the timing or magnitude of water releases by Windy Gap even if the studies indicated such changes were necessary. It is possible that the FWS could have required modification of subsequent projects to compensate for any harm to the endangered fishes caused by inadequate information on the effects of Windy Gap. However, since that opinion was issued in 1981 the FWS has allowed 32 additional projects -- every water project in the upper basin to date since Windy Gap -- to go forward while it conducts further study (Figure 2).

In total, these 33 projects have depleted or will soon deplete 415,914 acre-feet of water annually from the upper Colorado River basin. In 1981 the FWS acknowledged in its opinion on the Windy Gap Project that the fact that water is depleted from the rivers reduces the flexibility of the system to withstand additional water losses without detrimental impacts to essential areas. Four years, 29 projects and 358,614 acre-feet of water later, in its four most recent upper

Figure 2

NUMBER OF 'WINDY GAP' OPINIONS

Colorado River basin biological opinions issued in January and February of this year, the FWS once again reiterated its judgment that the Colorado River system is losing its flexibility to withstand additional water losses without adverse effects to the endangered fishes. (See for example the biological opinion for Union Parachute Creek Oil Shale Phase II expansion, January 30, 1985.) However, as in each of the previous 29 so-called "Windy Gap no-jeopardy" opinions, the FWS allowed the 4 projects to proceed, despite the admittedly adverse cumulative effects of water depletion, in exchange for funding of measures by the project sponsors to develop data on the needs of the fishes.

Prior to 1981 the FWS judged that because of the cumulative adverse effects of water development no further depletions from the upper basin should occur until data demonstrated that such water losses would not be harmful. Since 1981 the FWS has judged that although the cumulative effects of water development are adverse, every water-depleting project should be allowed to proceed while data are gathered on the impacts to the fishes.

To fund the estimated \$25 million needed for these measures to develop data on the needs of the fishes, each of the 33 project sponsors was assessed a fee based on the quantity of water proposed to be depleted and the volume of water remaining after flows to the lower Colorado River basin are delivered. The 33 projects should have contributed approximately \$4 million toward identifying impacts to the fishes and other conservation measures. However, the funds for

research and additional activities do not have to be made available until the depletions actually occur. Consequently, although 33 projects have been cleared for construction only \$772,123 has been made available so far to study their effects on the fishes. Not having the money to conduct the studies until the depletions actually occur ensures that the studies will not prevent the projects from being completed as planned. Moreover, the FWS' Windy Gap funding approaches prevented the FWS from collecting the biological information it needed to evaluate the impacts from each additional project for which consultation was requested.

The way the FWS handled the past 33 projects now also prevents adequate evaluation of 27 more projects for which consultations are pending or anticipated in the near future. These projects will deplete an additional 183,967 acre-feet of water annually from the upper Colorado River basin. The FWS informed the NWF two weeks ago that they do not intend to use their Windy Gap approach on these additional 27 projects. We understand further that approval of these projects no longer will be contingent on funding research on the effect of their depletions on the continued existence of the endangered fishes. It appears now that the FWS will provide the projects with "no jeopardy" opinions that will allow them to go forward with their planned depletions and will require them to pay only for non-flow conservation measures such as fish passageways. The FWS apparently is counting on being able to get flows of proper timing, magnitude and temperature from changes in the operation of existing and future Bureau of Reclamation

projects. But future approval of some 20 other water depletions doesn't appear to be contingent upon whether the FWS is actually successful in getting changes in flows from existing and planned BuRec projects.

Additionally, the FWS gave approval to 33 projects on the basis that further study would be conducted on those projects' impacts. Those studies by and large have not been done and, with this most recent change in the FWS' position, most likely never will be done. Yet the FWS appears poised to let 27 more projects go forward without knowing what the impacts were of the first 33. The FWS, thus, continues to fail to address the cumulative effects of individual water depletions, except to write them all off together, with the suggestion that the previous projects didn't have any effect and each individual future project also won't have any effect.

The FWS should not issue any more "no jeopardy" opinions for water-depletive projects in the Colorado River's upper basin until it can provide what it said was needed in 1980 -- the biological information to ensure that any further reductions will not be harmful to the endangered fishes. Nor should non-BuRec projects be absolved from providing needed flows until the FWS has secured with certainty the water releases needed from the BuRec's projects.

When other federal agencies or permit or license applicants will not concur to an extension of consultation, the FWS may be forced to render a biological opinion on the basis of inadequate information. In this situation the FWS should issue a jeopardy opinion subject to re-evaluation on the basis

of new information, if any. In the alternative, the federal agency or project sponsor can seek an exemption where irresolvable conflicts exist. The NWF and other conservation organizations helped streamline the exemption procedure in 1982 in response to complaints by spokespersons such as Roland C. Fischer, Colorado River Water Conservation District, that the process was "time-consuming." Notwithstanding that amendment, no water project has attempted to use the exemption process.

The use of "jeopardy" opinions is especially appropriate in the context of water depletions in the upper Colorado River basin and their effects on endangered fish species. As outlined above, the entire history of water development in this basin has led to a decline in these species. It is difficult to ignore the fact that declines in the quantity and quality of water in the habitats to which these fish species have adapted means fewer fish. That point is already evident.

While it may be possible to develop more precise information on these impacts it is clear that these projects, particularly when taken cumulatively, are adversely affecting habitat to the point that the fish are near extinction. Given this context, FWS has no business issuing "no jeopardy" opinions that allow irretrievable commitment of resources simply because the impact of a particular project cannot, supposedly, be precisely documented. Letting 33 projects be built is not an acceptable means of more precisely determining their impacts. If Section 7's prohibition of jeopardy has any valid meaning, it means that the onus should be put on the project sponsors to demonstrate that their projects are not

likely to jeopardize endangered species (singularly or cumulatively), instead of putting the responsibility on the FWS to demonstrate jeopardy. This forces the project sponsor to bear the burden of any uncertainty there may be, instead of having the species bear that burden. Certainly if the FWS issues a jeopardy opinion, new information can trigger further analysis. However, in the spirit of Section 7 (d) that "second look" must occur before the project is built. Otherwise we run the risk of taking so long to prove conclusively the cause of the fishes' decline that it is too late to save the species. That means, of course, that some projects are not going to go forward in the face of inadequate information.

WESTERN WATER PROJECTS SHOULD NOT GET SPECIAL
TREATMENT UNDER THE ESA

Since the ESA was passed in 1973, all projects, including western water projects, that are funded, approved or carried out by a federal agency must take steps to protect endangered species and their habitats. No western water project has ever been prevented ultimately from going ahead because of this or any other ESA provision. Even the most controversial projects have proceeded. Special provisions in the ESA to prevent or limit the FWS' ability to require projects to provide the instream flows necessary for protection of endangered species or their habitats are not warranted. No species is any less jeopardized nor its habitat any less adversely affected by the unbridled exercise of state water rights than by the exercise of any other property rights. Congress already has provided

western water developers and others with two specific and limited types of "escape valves" for conflicts between endangered species protection and economic development. First, western water projects must be offered "reasonable and prudent alternatives" (i.e., mitigation measures) whenever possible, which would allow projects that would otherwise jeopardize a species' existence to proceed without causing harm. Second, Congress created an Endangered Species Committee to review irresolvable conflicts and empowered it to allow projects to proceed even if they cause the loss of a species. Western water developer claims that the ESA stops projects must be viewed with these criteria in mind: First, is there an irresolvable conflict or are there reasonable and prudent alternatives? Second, if there is an irresolvable conflict, has the developer applied for an exemption from the Endangered Species Committee? No western water project satisfies these criteria.

The vast majority of western water projects have never even been confronted with reasonable and prudent alternatives or irresolvable conflicts because the FWS has found that they are not likely to jeopardize threatened or endangered species or adversely modify their critical habitat. The NWF has analyzed information on 140 projects in the 17 western states which proposed to divert, store or consume water and for which were provided final biological opinions from the FWS between 1977 and the present. Approximately 80 percent (109) of these western water projects received "no jeopardy" findings and were allowed to proceed. Six projects were found to enhance the

conservation of species. If anything, as indicated earlier, there is a disturbing trend in the findings of the FWS' biological opinions on western water projects (Figure 3). From 1977 to 1981, "jeopardy" findings accounted for 32 percent of all biological opinions issued by the FWS for water projects in the 17 western states. From 1981 to the present only 8 percent of all western water projects received "jeopardy" opinions. We can think of no biological explanation for this dramatic decrease in issuance of "jeopardy" findings which begin in 1981.

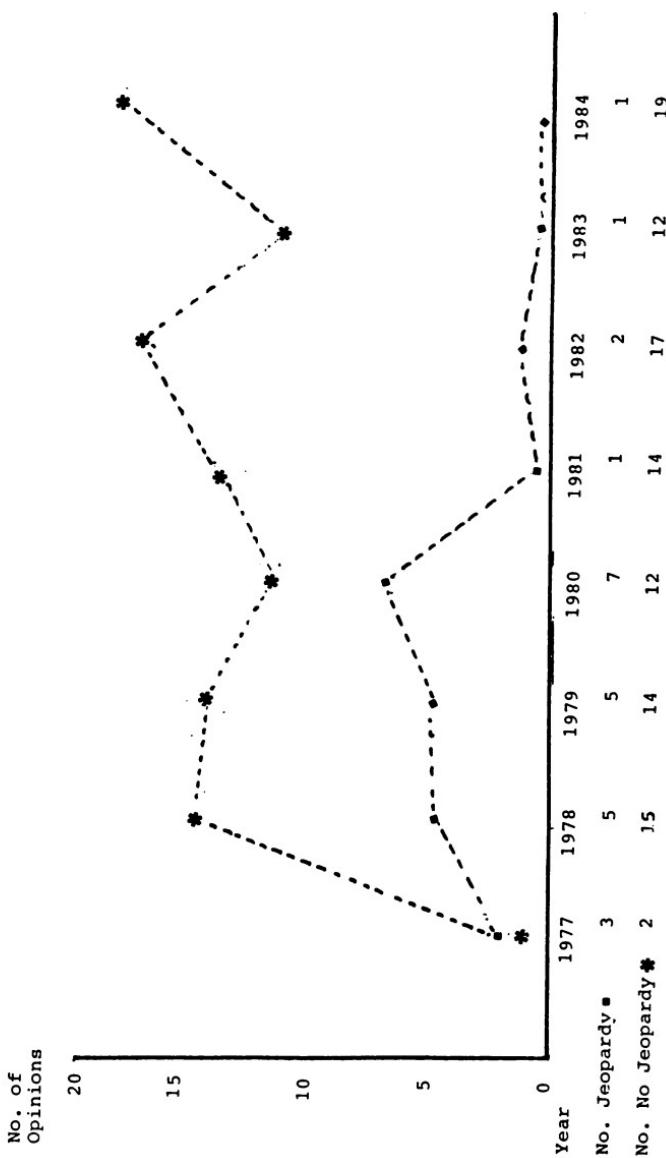
SOME CONFLICTS BETWEEN
THE ESA AND WESTERN WATER DEVELOPMENT
SHOULD BE EXPECTED

The extent of water development and corresponding habitat destruction described above for the Colorado and Platte Rivers is important information to keep in mind in any discussion of the need for balance in approaches to water development and endangered species protection. We are fast nearing or already have reached the point where 80-95 percent of the available water in the Platte and Colorado Rivers has been appropriated. We are no longer talking about how to divide up the pie of western riverine habitats, we are talking instead about what will happen to the last remaining sliver of that pie. It is well past the time when the balance should shift from unlimited water development toward protection of endangered and threatened species.

It should not be surprising, therefore, that there are some conflicts in the upper Colorado River or Platte River basins, given the contradictory goals of protecting riverine

Figure 3

**NUMBER OF 'JEOPARDY' AND 'NO JEOPARDY' OPINIONS FOR WATER PROJECTS
IN THE 17 WESTERN STATES 1977 - 1984**



habitat to ensure the survival of endangered species and maximizing water development. The existence of such conflicts is not an indication of problems with the ESA or that the Act needs to be amended. The ESA currently provides flexibility and guidance sufficient to resolve most conflicts.

Administrative solutions may be possible and are being pursued for both the upper Colorado and Platte River basins.

Coordinating committees established by memoranda of understanding among the FWS, BuRec and the affected states have been established. The NWF is participating directly on the one recently formed for the Platte River. We believe, however, that the FWS has foreclosed many possible alternatives to resolve conflicts in the Colorado River's upper basin by issuing at least 15 "Windy Gap" no-jeopardy opinions for water depletions while the coordinating committee for that basin has been deliberating. Issuance of additional opinions while the Coordinating Committee is doing its work would further compromise the process. We caution further that any solutions identified by the Coordinating Committees must be consistent with the goals and requirements of the ESA to conserve endangered species and the ecosystems upon which they depend. Moreover, we should expect the ESA occasionally to prevent construction of projects or force them to seek exemptions. These tough requirements of the ESA, while producing occasional conflicts, have had the beneficial effect of encouraging a renewed interest in water conservation in the West. The ESA also has forced closer scrutiny of marginal projects.

IMPROVEMENTS IN STATE WATER LAWS WOULD REDUCE
CONFLICTS BETWEEN ENDANGERED SPECIES
PROTECTION AND WESTERN WATER DEVELOPMENT

When the ESA's tough requirements are invoked by the FWS, it is the final warning signal that a natural ecosystem has been so degraded and destroyed that its species can no longer survive there. Fishes like the bonytail chub are among the rarest of this continent's species because their natural riverine habitat has all but been eliminated by water impoundments and diversions. Moreover, long before species become imperiled by unrestricted water development, many other values maintained by natural river flows, such as water quality, groundwater supplies, waterfowl habitat, and recreation, are lost or diminished.

A major reason why natural riverine habitats have reached the condition in which the existence of species like the bonytail chub and whooping crane is jeopardized is that state water laws for the most part do not recognize maintenance of instream flows as a beneficial use and valid exercise of water rights. If the federal government, private conservation organizations and other interested parties could acquire water rights within the framework of state laws for the purpose of maintaining instream flows, conservation of natural riverine habitats could be enhanced. Such changes in state water laws to allow maintenance of instream flows would aid in conservation of species dependent on natural riverine habitats and would make it less likely that these species would require protection under the ESA. Use of the ESA to protect species dependent on naturally flowing western rivers tells us in the

strongest possible terms that we have failed to use these resources wisely and that the human species continues to ignore the warnings sent by the ESA at its own peril.

The NWF assumes that western water developers agree with the goal of protecting endangered species. Given the present failings of state water law, how would they achieve this goal if they prevent the ESA from maintaining adequate instream flows for endangered species dependent on western rivers?

Offsetting the destruction of habitat from reduced water flows with construction of hatcheries and other artificial devices, as the FWS and some western water interests recommend, is completely inconsistent with the goal of the ESA to preserve the ecosystems upon which threatened and endangered species depend.

The federal government clearly has the regulatory authority to protect river flows for the public interest. Those who argue for a different approach in which the federal government purchases water rights to maintain stream flows needed by endangered species must be willing to support necessary appropriations by Congress for these purchases. And they must be willing to make final project approval contingent upon the appropriation of funds for this purpose. Most importantly they also must be willing to support federal legislation or changes in their own state laws to overcome the following obstacles:

1. The federal government needs to condemn water rights in order to obtain rights of sufficient seniority to maintain adequate flows.

2. State laws must recognize the maintenance of stream flows as a valid exercise of water rights.
3. The ability to acquire rights to maintain stream flows must not be limited to the state alone, as it is in some western states.
4. State laws must allow for interstate water allocation, i.e., acquisition of a water right in one state for the purpose of exercising it in another.

Finally, it should be recognized that there is no way to amend the ESA to allow western water projects to go forward regardless of their impact on riverine habitat, short of project-by-project exemptions, without adversely affecting endangered species throughout this nation.

Thank you for this opportunity to present our views. We look forward to working with this Subcommittee on a 5-year reauthorization of increased funding for the ESA.

STATEMENT

ON BEHALF OF

THE AMERICAN PETROLEUM INSTITUTE

ON

S.725

REAUTHORIZATION OF THE ENDANGERED SPECIES ACT

BEFORE

**THE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION OF
THE ENVIRONMENT AND PUBLIC WORKS COMMITTEE**

OF

THE UNITED STATES SENATE

**APRIL 16, 1985
WASHINGTON, D.C.**

The American Petroleum Institute (API) is pleased to submit this statement for the record on S. 725, the Reauthorization of the Endangered Species Act (ESA). API is a national trade association with 230 companies and over 6,000 individual members engaged in all phases of the oil and gas industry. Many of our members must frequently respond to the requirements of the ESA and, as a result, are keenly interested in the Subcommittee's deliberations on the ESA.

The objectives of the petroleum industry are in harmony with those of the conservation community with regard to the need to identify and protect those species that, for one reason or another, face man-induced extinction. However, in accomplishing those objectives we must provide for a process that allows for certainty, timeliness, the ability to undertake long-range project planning, and the opportunity to train our people and contractors. We would like to offer suggestions in this statement to improve the Endangered Species Act.

Incidental Taking Permits

One of the key features of the ESA is "taking." "Taking" is defined as: to harass, harm, pursue, hunt, shoot, wound, kill, take, capture, collect, or to attempt to engage in such conduct. Before 1982, Section 9 prohibited "taking" of a protected species in nearly all instances. There were only a few exceptions to this prohibition which were related to scientific matters.

However, in 1982 Congress amended the ESA by refining the concept of "incidental taking," i.e., in specific situations, "taking" of a species "incidental" to otherwise lawful activities

was permitted. Unfortunately, the 1982 amendments created two separate standards for the applicant. Currently, for projects involving Federal actions a Section 7 consultation is required. In this situation, an incidental taking permit applies if: (1) the incidental taking will not jeopardize the continued existence of the listed species and (2) the applicant complies with "reasonable and prudent measures" specified by either the Secretary of the Interior or Secretary of Commerce to minimize or avoid adverse effects of incidental taking. For all other activities that do not require Section 7 consultations, Section 10(a) of the ESA authorizes the Secretary of the Interior or the Secretary of Commerce to issue a permit for incidental taking. To obtain an incidental taking permit, an applicant must submit a "conservation plan" which must set forth, among other things, the specific steps that the applicant will follow to minimize the impact of taking on the protected species under consideration.

In the petroleum industry's experience, the conservation plan exceeds the protection required to minimize the effects of incidental taking under the "reasonable and prudent measures" standard established under Section 7 of the ESA. In essence, the conservation plan must provide for the long-term habitat needs of not only listed species, but proposed and candidate species as well. Moreover, in areas where Federal parcels are interspersed with state and private lands, the existence of these two standards creates confusion for project planners and compliance coordinators.

We believe that the problems associated with excessive conservation plans stem from the precedent established by the San Bruno Mountain (SBM) conservation plan in Northern California. According to the 1982 amendment's legislative history, the SBM plan was the model for the incidental taking provision in Section 10(a). Even though the SBM plan failed to specify the smallest geographical unit which must be addressed in a conservation plan, it was used as a prototype to resolve disputes among adversarial interests in an area where public and private lands are interspersed and governmental jurisdictions overlap. Similarly, regulations proposed under Section 10(a) follow the SBM conservation plan as a model, but they do not specify the smallest geographical unit.

In this regard, we believe that the 3,600 acres that were included in the original SBM conservation plan is not an appropriate nor a desirable number of acres for conservation plans in other areas. In addition, we see no evidence that the SBM conservation plan or proposed regulations take the duration of the project into account, nor do they address the actual magnitude of impacts from incidental taking.

The American Petroleum Institute believes that individual developers should be able to obtain site-specific incidental taking permits where the protection provided to the species is analogous to the protection provided to the species under the ESA's Section 7 "reasonable and prudent measures." To solve the problems with the ESA's Section 10(a) incidental taking permit, we recommend that the following steps be taken:

1. Resolve the inconsistent standards required to mitigate incidental taking under Sections 7 and 10 by specifying that the purpose of the Habitat Conservation Plan is analogous to those "reasonable and prudent measures" necessary or appropriate to minimize the impacts caused by incidental taking.
2. Reaffirm that the intent of the incidental taking provision was to provide Secretarial discretionary authority to issue Section 10(a) permits that address whatever geographical units may be appropriate to the nature, size and duration of the project, and that they may be issued for projects conducted by individual landowners.

Incidental Taking and the Marine Mammals Protection Act

Another inconsistency related to incidental taking seriously affects offshore operations in the petroleum industry. The Marine Mammals Protection Act (MMPA) does not include incidental taking permits for activities other than for those related to scientific research. Therefore, the 1982 ESA amendments on incidental taking do not currently apply to marine mammals.

The inability of offshore operators to obtain incidental taking permits under the Marine Mammal Protection Act places our members in an untenable position. Although members of the petroleum industry include prudent mitigation measures to insure that they will not jeopardize marine mammals, we are still exposed to liability and uncertainty.

The case of the gray whale illustrates this point. Industry continues to participate in an ongoing series of studies to monitor the effects of its activities on marine mammals. For example, research completed to date in the Beaufort Sea suggests that the population of endangered gray whales is increasing and that geophysical survey activities do not harass marine mammals.

We find, however, that offshore operators can implement all of the mitigation measures the agencies require, yet still be exposed to liability under the Marine Mammal Protection Act.

In amending the Endangered Species Act to authorize the issuance of incidental taking permits, the Congress sought to eliminate this sort of uncertainty. We endorse the National Marine Fisheries Service suggestion for a technical amendment to conform the incidental taking permit process for marine mammals to that used for all other endangered species. We propose amending Section 17 of the ESA as follows:

"Except as otherwise provided in this Act, no provision of this Act shall take precedence over any more restrictive provisions of the Marine Mammals Protection Act of 1972, except with regard to taking authorized by Section 4(d), 7(b)(4), and 10(a)(1)."*

Experimental Populations

In 1982, Section 10 of the ESA was amended to authorize the Secretary of Commerce and Secretary of the Interior to utilize experimental populations as a management tool for promoting the survival and recovery of listed species. Section 10(j) was created to provide the Secretaries flexibility in exercising management options, and it specified procedures for establishing experimental populations.

Sections 10(j), however, does not state expressly that the prescribed procedures are the only procedures which the Secretary of Commerce or the Secretary of the Interior can use to satisfy Section 10. We believe that the procedures established by

* Underlining denotes new language.

Section 10(j) should be followed. Without clear direction on the Section 10(j) process, landowners face uncertainty that impedes their ability to make long-term commitments, if the option of experimental populations is exercised.

API encourages Congress to eliminate this problem by clearly specifying that whenever either Secretary wishes to establish an experimental population outside the current geographical range on the species, the specified procedures of Section 10(j) must be followed. Such modification would greatly reduce uncertainty for parties that will be affected by the establishment of experimental populations.

Recovery Teams and Plans

The intent of the ESA is not merely to list species, but to provide for positive programs to aid their recovery. Those programs were to be developed and carried out by recovery teams. The record to date is rather dismal. We continue to list species and yet there are only 164 approved recovery plans in place for 224 listed animal species for the United States. Of these, few plans have been carried out. It seems logical to expect that when a species is listed, resources are made available to increase the likelihood that it will recover and be delisted. A greater effort must be made to execute meaningful management programs that will lead to the recovery of the species. In addition, there should be a commitment to develop a recovery plan within a reasonable length of time. The public should have an opportunity to participate in the development of a recovery plan.

Cumulative Impact

Another difficulty is cumulative impacts. There is a potential problem for projects that require a long period of time from their inception through their implementation. How many projects should be given a no-jeopardy opinion and how much of a buffer zone should we allow for a given species in a given area? If a full-time recovery team were in place, a report could be issued on the status of a species at regular intervals. Such a report would serve as an early warning device, so that the cumulative impact of various projects could be assessed accurately. This report could be tied to the five-year review process that already exists under the ESA.

Inadequacy of Data and Responsibility for Generating Data

The ESA requires that biological opinions be based on "available" information. If the information is available, it should be used. If there is no information, it should be generated. If a species is listed, there must be a concurrent commitment to generate the data necessary to evaluate permit applications and to implement a program for the species recovery. In addition, it should be ensured that surveys or studies which contain additional data can be completed within the scope of the mutually agreed extension period.

Scientific Review Process

When faced with listing or jeopardy decisions, there are instances when scientists disagree on the conclusions drawn from available data. In the past, API has supported the concept of a

scientific review process which, in the case of the ESA, may serve as a useful way to resolve this kind of problem.

There needs to be an opportunity to consult with credible scientists who are not directly involved in the process and who will recommend an appropriate course of action. This scientific review should ideally occur before the exemption process in the case of a jeopardy opinion. However, it should not preclude an applicant from pursuing an exemption if, knowing that the interpretation of the data for a jeopardy opinion has been upheld, the applicant still desires to pursue a permit.

A precedent for this procedure was set with the Illinois mud turtle. The Fish and Wildlife Service (FWS) interpreted its data to indicate a jeopardy situation, while a consulting team of scientists acting on behalf of a developer generated data that were interpreted otherwise. A classic confrontation was developing. The FWS took a commendable step and went to the National Academy of Sciences for assistance. The Academy is not geared to producing short-term analysis, but it is geared to identifying credible scientists. It developed a list of experts and FWS selected a team from that list. The team analyzed the available data and made a recommendation which the FWS followed.

This process served two functions: (1) it provided for a resolution of the problem; and (2) it alerted all the scientists, acting on behalf of the parties involved, that their work would be subject to peer review by highly qualified outside experts.

Early Consultations

The ESA currently states that agencies may engage in early consultation with applicants. Pre-project consultation allows

private parties to modify or alter their project plans at an earlier, more flexible point in the design phase of the project. Congress has supported pre-project consultation, and the regulatory agencies have also made strong requests for this kind of process.

Yet we find, at the field level, that action agencies have denied such requests. We urge you to encourage the action agencies to engage in pre-project consultations when requested to do so by a citizen contemplating an activity which would trigger the administration of the ESA.

Biological Opinions

It is in the interest of the species to have the best data available used in the determination of jeopardy or no-jeopardy opinions and in the formulation of reasonable and prudent alternatives under Section 7. Such data may rest with the applicant, the regulatory agency, or both. At present, the applicant is excluded from the decision process leading to a jeopardy or no-jeopardy opinion. We believe it is desirable to allow the applicant, upon request, to participate in this process.

Mitigation Banking

The Section 7 jeopardy opinion process contains language calling for reasonable and prudent alternatives, and the incidental taking portion of Section 7 mentions reasonable and prudent measures. Both are approaches to mitigating adverse impacts. Within the range of reasonable and prudent measures, we

suggest that the Committee consider the concept of mitigation banking as one available alternative under the ESA.

Mitigation banking, as we use the term, involves the recording of "habitat credits" for voluntary work that enhances or maintains the environment. This work, performed by companies or individuals, is accomplished in advance of a specific permit application. When a company or individual needs a permit that requires mitigation, the "credits" that have accumulated in the "bank" can be withdrawn.

Conclusion

In conclusion, API strongly supports the goals of the Endangered Species Act. Clarification of Congress' intent on the issues enumerated in this statement will enhance the likelihood of recovery for endangered species and, at the same time, lessen the economic burden our members face. Furthermore, a technical conforming amendment which makes the MMPA compatible with the ESA will resolve a major inconsistency on incidental taking permits. We appreciate the opportunity to submit this statement.

STATEMENT OF JOE HELLE
ON BEHALF OF THE
NATIONAL WOOL GROWERS ASSOCIATION
BEFORE THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
ON THE ENDANGERED SPECIES ACT
APRIL 16, 1985

Mr. Chairman, members of the Committee, I am Joe Helle, a rancher from Dillon, Montana. Livestock, primarily sheep, are my only source of income. My ranch is a typical western operation consisting of rangeland, mountain summer range and hayland pastures. I serve voluntarily as the Chairman of the Animal Damage Control Committee of the National Wool Growers Association. The NWGA is the voice of the nation's 125,000 people who raise sheep. As Chairman of the Animal Damage Control Committee, it is my responsibility to collect problems relating to predator control and wildlife management and bring them before the decision makers. That is what I am doing here today. I am presenting to you a serious concern of our membership, and one that I can relate to from personal experience. That problem is the implementation of the Endangered Species Act.

Mr. Chairman, I make my living from renewable natural resources. My "home" is also the home for untold numbers of deer, elk, coyotes, badgers, rabbits, eagles and hundreds of other birds and mammals. I accept and appreciate most of these guests in my "home", as long as they are managed as a secondary benefit to the primary purpose of this ranch operation. The primary purpose of a ranch operation is to be a profitable independent business. My "office" is the sweeping rangelands of western Montana. My "supplies" are sun and wind, rain and snow, soil, grass and water. I work hard to keep my "office" organized, staffed and efficiently run so that I can pay my taxes, my bills, and feed and cloth my family. Because of the nature of my work, there are many factors over which I can exercise little control. The weather is a big one. The killing of my sheep by wild animals, the world demand

for wool, the U.S. consumption of lamb, property taxes and public opinion are others. On the other hand, there are many inputs I can control, such as the quality of my wool and lamb, the level of grazing on my lands, and to a degree, the time of my lambing and calving and the exposure of my livestock to the elements. Unfortunately for me, and for many others like me, the Endangered Species Act has interjected another uncontrollable element into my ranch operation.

When the Endangered Species Act was first enacted, I think nearly everyone in the country was supportive of the concept. I know I was, although I was somewhat leery, because so many times a law is enacted with good intentions and its administration becomes a quagmire of bureaucracy. OSHA was a classic example of what I am trying to describe. As a matter of fact, OSHA and Endangered Species were born in the same era, a period when regulatory agencies were given license to further write the law once it had passed Congress. We have seen that very thing happen with the Endangered Species Act. Instead of just protecting species that were in danger of extinction, as we thought it would, the law has become a tool to stifle development, inhibit productivity, eliminate profitable livestock and grazing management, and propagate free roaming species of dangerous wildlife! I do not believe that this is what Congress intended.

The Endangered Species Act has grown in other ways. There are now 225 plants and animals on the endangered list, and 52 threaten species. This is a total of 277 items. There are 406 equivalent full-time employees in the program, or one and one-half employees for every listing! That sounds top heavy to me. In FY 1985, the budget for Endangered Species is \$26,683,000, or \$118,591.11 per listing. We are spending far more to preserve plants and animals than we are spending on education, school lunches or programs for the needy. This is a distorted perspective, and raises questions as to where this nation's priorities lie.

Last summer, a grizzly bear attacked my sheep, not once but three different times. The law prevented me from protecting my flock because the grizzly is a threatened species. I abided by the rules and notified the authorities. Eventually, the bear was tranquilized. Much to my dismay, the authorities turned it loose, right in the proximity of my sheep. Again, it threatened my herd, and this time it was caught, fitted with a radio collar and transported nearly 100 miles away. A few days later it returned! Right now we don't know where it is, and I must go through another summer worried about my sheep, my herder and my family members who work on the ranch and service these sheep camps.

Let me cite you another incidence. Richard Christy, another Montana sheep rancher, had a similar experience. After repeated attacks on his sheep, the bear emerged one evening from the timber and advanced on Mr. Christy and the herder. Fearing for his life, and exasperated with the destruction of his private property, Dick Christy shot the bear. He was cited before an administrative law judge and fined \$2,500. Not only was he out the money and sheep that were killed, he had to give up the lease upon which he was grazing and sell his sheep. His investment was ruined, his reputation soiled and his ranch operation terribly disrupted. Mr. Christy has appealed his conviction, and perhaps it is time we determined whether a law enacted and subsequently interpreted through regulation, then supercedes the constitutional right of an individual to protect his property. I am convinced that the Endangered Species Act was never intended to force people into committing criminal behavior.

Under the authority of the Endangered Species Act, there are plans currently underway to propagate a free roaming population of wolves in the Yellowstone Park area. Civilization has eliminated much of the ecological niche for the wolf, and only if the wolf is given priority above all other species, including man, can this plan hope to succeed. And then, what will we have? We will have spent hundreds of thousands of taxpayer dollars to try and force a square peg in a round hole. We

will have trammelled on traditional and existing rights of property owners, recreational users and stock growers within and adjacent to the core propagation area. And finally, and critical to our concerns, we will have created a reservoir of predators that will disperse into the surrounding socio-economic community because of the wolves territorial nature. We will have a predator that can't be legally destroyed! Would we give a safecracker immunity from prosecution simply because there are not as many safecrackers as there are other types of criminals?

The National Wool Growers Association favors reenactment of the Endangered Species Act, with some important changes. Under the recent ruling of the U.S. Court of Appeals for the Eight Circuit on Sierre Club, et. al., v.s. Wm. Clark, et. al., No. 84-5042-MN; the states and federal governments right to discretionary authority for the taking of an endangered species was virtually eliminated. This ruling has determined that the Secretary of Interior can never authorize the taking of an endangered species, and only in extraordinary cases, authorize the taking of a threatened species. This can only force people to take matters into their own hands! This, in my opinion, is a far greater threat to restoration of a species than would be a controlled taking program. The statute should be amended to confirm and restore the discretionary powers of the Secretary and the state. We reiterate our position that the protection of rare plants and wildlife is a justifiable public venture. But, we do not agree that this public venture is a "protection at any cost" authorization. Above all, the Endangered Species Act must not abrogate constitutional rights. Private property rights are the bedrock of our legal system, and the foundation of our social order. We also feel the Act should be amended to call for specified population limits in given areas on species that unfavorably impact human activities. It is presently too open ended, and the recovery plans have no upper limits, nor population control authorities. We believe that dangerous or destructive, endangered or threatened species surrender their immunity when they invade private property outside their designated protective areas. If the animal is

outside the core area on private lands damaging private property, it should be destroyed without wasting the time and tax money as required under the current ineffective relocation programs. We also believe that economic impact studies should be required before a plant or an animal is awarded protective status in a given area.

It is time to take a good hard look at the purpose of the Endangered Species Act and how it is being implemented. We believe it needs to be refocused on its original intent of habitat preservation. If it is being used as a tool of oppression, as we contend it is in some cases, instead of a means of providing for the protection of truly rare plants and animals, then it is time to reconsider the legislation.

Many of us in the livestock industry can't afford federally sponsored biological experimentation at our expense. We can't afford another uncontrollable factor in our operations. What we can afford, and are willing to assist with, are reasonable, intelligent processes that enhance the environment for you and me and our subsequent generations. As currently implemented, the Endangered Species Act is not one of those programs.

Thank you for the opportunity to present our viewpoint here to day.

STATEMENT OF
AMERICAN CETACEAN SOCIETY
CENTER FOR ENVIRONMENTAL EDUCATION
DEFENDERS OF WILDLIFE
THE ENVIRONMENTAL DEFENSE FUND
FUND FOR ANIMALS
GREENPEACE USA
HUMANE SOCIETY OF THE UNITED STATES
I KARE WILDLIFE COALITION
NATURAL RESOURCES DEFENSE COUNCIL
SOCIETY FOR ANIMAL PROTECTIVE LEGISLATION
AND
THE WILDERNESS SOCIETY
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
OF THE
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
ON THE REAUTHORIZATION OF THE
ENDANGERED SPECIES ACT

PRESENTED BY MICHAEL J. BEAN
ENVIRONMENTAL DEFENSE FUND

April 16, 1985

This is the first opportunity this subcommittee has had to examine closely the results of more than a decade of experience in implementing one of the most important laws for which it is responsible, the Endangered Species Act of 1973. In that decade, we have learned that the road to extinction can be reversed. Species once seemingly headed inexorably toward that fate have been rescued and given a better chance for long-term survival. The bald eagle, though still endangered in most of the United States, is showing strong signs of recovery. The brown pelican of the Gulf and Atlantic coasts recently completed a successful recovery and now no longer needs the protection of the Endangered Species Act. The peregrine falcon, once completely eliminated from the eastern United States, has been successfully reintroduced there. The American alligator, once endangered, is now abundant in parts of its range.

These are signal successes, but they must be kept in perspective. The endangered species program is a very modest program of a very small agency, yet the threat of endangerment facing our native wildlife and wild plants is no small problem. Indeed, there is ample reason to fear that, despite these important successes, for a great many species, the Endangered Species Act is failing seriously to meet its objectives. Even within our own borders, species that could be

conserved without heroic and extravagantly expensive measures are being lost, or are being made much more vulnerable to loss, principally as a result of insufficient resources available to the program.

The testimony that follows calls for several measures to improve the effectiveness of the endangered species program. The most important of these is for a major increase in the funds available to implement it. In so recommending, one cannot be oblivious to the chorus of calls for reducing, rather than expanding, federal programs generally. Before heeding that chorus, however, one must acknowledge that the most successful national investment in conservation was the product of a time in our country's economic history far more desperate than today. In the very depths of the Great Depression, with massive unemployment, a shrinking tax base, and declining gross national product, Congress took the remarkable step of diverting existing federal revenues from the general treasury into a special fund that could be used only for the conservation of game. That Depression-era program, the so-called "Pittman-Robertson" program, has made possible successful game conservation for half a century, though it must have seemed utter folly to most people in light of the extraordinary social and economic problems confronting the country at the time of its enactment.

The crisis confronting wildlife is far greater today than during the Depression or at any prior time in our history, yet the country's ability to support essential conservation programs is much greater than when the Congress of a half a century ago had the vision to pass the Pittman-Robertson Act. Unless we exercise the same vision and foresight today, our nation's temporary economic difficulties will be the excuse for suffering permanent and irreversible damage to the valuable biological heritage we leave to our children and grandchildren.

I. An Appraisal of the Act's Successes and Failures

Against the short list of species whose recovery over the past decade can be documented, there is a large and growing number of species that have continued to decline since passage of the Endangered Species Act. The problem is perhaps most acute with respect to the so-called "candidate" species that are known to be eligible for protection but that still receive none. Since 1973, the list of threatened and endangered species has grown by about 429 species, an average of 39 per year. Yet, the U.S. Fish and Wildlife Service has identified, from within the United States alone, more than a thousand additional species for which it already has sufficient information warranting proposals to add them to the list. Such proposals cannot be made currently, however, because of

inadequate resources. If this backlog of "category I candidate" species is to be handled at a rate equal to the historical average (a dubious assumption since the average number of new listings over the past four years has been less than half the historical average), more than a quarter century will be needed just to extend protection to those species already known to need protection now.

Unfortunately, many of these cannot wait another quarter century. Already, the examples are many of species that have suffered serious declines since being identified as needing protection. The Texas Henslow's sparrow, for example, apparently went extinct within the past year, even as the Fish and Wildlife Service was endeavoring to decide whether it should be listed; so too the Tarahamaro frog in Texas, identified as a formal candidate for listing in 1982, but apparently extinct today without ever having been listed. Perhaps a hundred still existed in 1979. Likewise the Wyoming toad, though formally listed as endangered in 1984, was apparently already extinct by then; at least a few dozen were known to survive only four years earlier.

In 1979, the Governor of Guam petitioned for the listing of that island's native birds. Five years later, when the listing was finally accomplished, it was already too late, or nearly so, for many of the birds. The Guam bridled white-eye, for

example, still numbered about 2,000 as recently as 1981, two years after the Governor's petition, but by the time of listing it was extinct. The Guam rail had declined from similar levels to only about 25 birds in the wild; Guam authorities believe it is now no longer possible to preserve it in the wild and are endeavoring to catch the wild birds for a last-ditch captive propagation effort. For the Guam broadbill, not even that hope remained by the time of the listing; only a few males are thought to have survived the Interior Department's ponderous decision-making.

The Modoc sucker, a California fish, has been of concern to the Fish and Wildlife Service since 1966. As recently as 1978 it occurred in at least eight different streams. By the time it was proposed for listing in 1984, it had been eliminated from five of those streams. A similar decline was experienced by the Selkirk herd of woodland caribou, the last population of the species regularly occurring in the Lower 48. In 1981, an estimated thirty animals comprised this population. Despite being petitioned to list it for protection, the Fish and Wildlife Service delayed doing so until 1983, when the population had dwindled to fewer than twenty. Indeed, the Service did so then only in the face of a threatened lawsuit by the National Audubon Society.

The problem described here is by no means limited to animals. The Smithsonian Institution, in a comprehensive 1975 report, identified a large number of native plants needing protection. A decade later, only a handful of them have yet been protected and many have continued their steady slide toward extinction. For example, the Arizona agave, a desert succulent, occurred at a dozen or more different sites as recently as 1980; today, a single site, with just three plants, remains. Another rare plant, the Bradshaw desert-parsley, was known to occur in healthy populations at six different locations in the Pacific Northwest in the late 1970's; since then, all but one has been destroyed and that one is of marginal viability. For the Koehler's rock cress, a denizen of rocky ledges in Oregon, six of its known populations have been destroyed since 1979. Finally, the large-fruited sand verbena's only known population has apparently disappeared since 1983 without ever having been given the protection of the Act.

In New Jersey, the Fish and Wildlife Service stood helplessly by recently while a developer under an Army Corps of Engineers permit destroyed one of the few colonies of the spreading globeflower, a striking wildflower that has been a candidate for listing for several years. Because it had not yet been listed, the Fish and Wildlife Service could not

prevent its destruction and the Army Corps would not. The examples go on and on.

In each of these examples, and in many others like them, the serious declines that occurred subsequent to the identification of the species as needing protection meant that by the time of listing, if the species still survived at all, the range of conservation options had narrowed drastically. In most cases, the easy and inexpensive options have been lost; the opportunity to experiment with a variety of different approaches has been precluded. All that remains to be tried are disparate last-ditch efforts more likely to be expensive and controversial than successful. With a significant additional investment today to accelerate the listing of species already known to be in need of protection, the need to choose between expensive conservation actions and species loss will be less frequent in the future.

Of course, merely listing a species as threatened or endangered offers no guarantee of survival. In the past year, the Palos Verdes blue butterfly, a California species listed as endangered in 1980, apparently went extinct as the last of its known habitats was bulldozed. Further up the California coast, the Lange's metalmark butterfly population has declined by more than half since its listing as endangered in 1976. The

California clapper rail, listed as endangered in 1970, has declined by two-thirds in the past decade. In Florida, the Schaus' swallowtail butterfly was recently reclassified from threatened to endangered due to declines in both its numbers and range since its 1975 listing. Elsewhere in Florida, the dusky seaside sparrow, federally protected since the nation's first endangered species legislation in 1966, now faces certain extinction as only a handful of males survive. The California sea otter, a playful mammal of the central California coast, may be declining in numbers after having been listed as threatened in 1977.

These examples underscore the fact that the listing of a species is just the first step toward its recovery. Without more, extinction is unlikely to be avoided. The current Administration has widely touted the fact that it has produced more "recovery plans" for listed species than any that preceded it. But recovery plans, like prescriptions for medicine, are pieces of paper. Unless one buys the medicine prescribed, recovery will not result. In virtually every example, the plans call for actions not yet taken, like the establishment of a second population of California sea otters, called for in a 1982 recovery plan but still not under way. They also call, in many instances, for acquisition of habitat, yet little progress has recently been made on this front.

Also key to the success of recovery efforts is the active cooperation of state conservation agencies. Many states, encouraged by the Act's promise of financial assistance for cooperative conservation programs, responded by developing a host of worthy and much-needed conservation projects that, for want of adequate and predictable assistance, could not be carried out. For example, states with cooperative agreements under Section 6 of the Act have consistently sought two to three times the amount of federal assistance that has been available for that purpose. More and more states have developed cooperative agreements, but without any corresponding increase in the size of the Section 6 pie. In fact, each state program's slice has shrunk on average by 80 percent in constant dollars since 1977, and, as a result, a majority of the listed species in the United States have yet to be aided at all by expenditures under Section 6. Attachment 1 illustrates graphically the erosion of federal support for state programs under Section 6. In light of the small and uncertain sums available for assistance, states are losing the incentive to develop the programs the Act was designed to encourage. Nebraska, for example, has decided not to seek a plant cooperative agreement because it sees insufficient prospect for adequate financial assistance under Section 6.

Looking beyond our borders, the situation is even more bleak. The training, technical assistance and other aid that

the United States could provide and that would truly demonstrate a commitment to the worldwide protection of endangered species have been virtually nonexistent. At the same time, both the numbers of species at risk and the practical costs of species loss for medicine, agriculture, and industry are undoubtedly far greater beyond our borders than within them.

Inevitably, the conclusion that must be drawn is that the goals of the Act have not been met and cannot be at the level of resources currently provided. That is not the fault of the current Administration or of any single Administration that preceded it; never have the resources available been commensurate with the need.

II. The Most Pressing Need: More Resources

From the preceding discussion it is clear that if one takes seriously the goals and objectives of the Endangered Species Act, substantially greater resources will have to be made available to attain them. At present program support levels, the list of the Act's clear failures will grow rapidly and likely overwhelm the few successes that the program can claim. The choices available to the Congress are few: either scale back the purposes and objectives of the program so that they

are capable of being attained at present support levels or increase that support so that existing purposes and objectives have a realistic chance of being met. The only alternative is to perpetuate the fiction that no serious problem exists.

Obviously, we believe that the purposes and goals of the Endangered Species Act are vitally important and that to back away from them would be both short-sighted and, in the long run, very costly. The responsible path, we believe, is to make the investment necessary now to give the program an opportunity to succeed. To have that opportunity, the program must be given sufficient resources to complete listing action on the already identified "category I candidate" species, not within another quarter century but within the next decade. It must be given sufficient resources to make possible not just the writing of recovery plans but their expeditious implementation. It must be given sufficient resources to enable the states to enter into a new partnership with the federal government, not just to remain as disaffected stepchildren in the overall conservation effort. Finally, it must be given sufficient resources to begin to address in a meaningful way the urgent problem of species loss beyond our borders. Attachment 2 sets forth our calculation of what such an opportunity to succeed is likely to cost. The total of \$80-90 million yearly is more than double the current

authorization ceilings, but is still small when compared to the cost of other programs of no clearly greater urgency.

III. Other Needs: Provide Limited Interim Protection to Candidate Species

Currently there is a large backlog of U.S. species that have been formally identified by the Fish and Wildlife Service for future listing action but that are not likely to be proposed for listing anytime soon because of the Service's resource limitations. These candidate species receive no legal protection whatsoever under the Act, yet many are known to have declined seriously, even to the point of extinction, since being identified as candidates. The Secretary of the Interior has clearly been without an adequate means of monitoring the status of these species so that he can act in time to prevent their further decline.

One mechanism for providing this sort of monitoring of candidate species is to treat them as "proposed" species for purposes of Section 7(a)(4) of the Act. That provision requires agencies to "confer" with the Secretary about planned action that are likely to affect adversely such proposed species. Conferral is a less formal and more flexible process than the "consultation" process that applies to listed species. Candidate species should enjoy at least as much protection as species proposed for listing because the Secretary has already

determined that, but for his own resource limitations, such species would in fact have been proposed.

In addition to treating candidate species as species proposed for listing, the standard that triggers the duty to confer should be modified. Currently, the duty to confer applies only with respect to actions that are likely to jeopardize the continued existence of the species or destroy its proposed critical habitat. That standard is far too rigorous because it assumes the very conclusion of the question that the conferral process is intended to examine. A more appropriate standard would require conferral for any action that is likely to affect adversely the continued existence of any proposed or candidate species.

IV. Other Needs: Provide Limited Additional Protection for Listed Plants

Listed plants receive the same protection as listed animals, with one key exception. Whereas the Act broadly prohibits the "taking" of any endangered animal anywhere by any means, only a very narrowly circumscribed prohibition applies to the taking of listed plants. Specifically, only listed plants on federal lands are protected from taking, and then only when the taken plant is "reduced to possession" by the person taking it. In simpler language, that means vandals can cut, uproot or otherwise destroy endangered plants on federal

lands without violating the Act. On private and other non-federal lands, the Act does nothing to prevent vandals, collectors, and others from destroying or collecting imperiled plant species.

Mounting evidence shows that effective plant conservation requires more than the Act provides. Many listed or candidate plants have been seriously reduced through overcollecting, including the Chapman's rhododendron, certain cacti and insectivorous plants of interest to hobbyists. Vandalism directed against endangered plants is also a problem for certain species such as the Virginia round-leaf birch tree.

Many landowners have willingly cooperated in the conservation of rare plants occurring on their property. But the Endangered Species Act does little to reinforce the cooperative spirit of these landowners. Trespassers who enter private property to take or vandalize endangered plants do so with no fear of the stiff federal penalties that apply to those taking endangered animals. Instead, only generally ineffectual state trespass laws apply. We therefor recommend that §9(a)(2) of the Act be amended to prohibit the malicious destruction of listed plants wherever they occur and to prohibit the removal of listed plants from non-federal lands except with the express consent of the landowner. Similar "landowner consent

provisions" are found in the laws of California, Florida, Georgia, Nevada, North Carolina, and Ohio.

V. Other Issues: The Act's Conservation Standard

The United States Court of Appeals for the Eighth Circuit, in the recent case of Sierra Club v. Clark, had occasion to consider the Act's conservation standard. Its ruling, that the Secretary of the Interior, in the absence of special circumstances, was constrained by that standard from authorizing the sport hunting of the wolf, a threatened species, has apparently generated some concern as to its reach. In evaluating that concern, it is important to examine the court's decision closely.

First, the court did not limit the Secretary's authority to take or authorize the take of predating or depredating animals in order to protect life or property. Indeed, the court left open two different means by which this can be accomplished: general regulations authorizing predator control activities and special permits under Section 10(a)(1)(A) of the Act. The latter authority is equally applicable to both threatened and endangered species. Thus, the often preferred argument, that effective control of endangered or threatened predators is necessary to sustain public support for their conservation and

deter vigilantism, can be accommodated under the court's opinion.

Neither does the decision limit the Secretary's discretion with respect to species that are part of an "experimental population". Instead, the court very clearly refrains from reaching any conclusion on that issue. Thus, the very narrow decision of the Court is that the Secretary may not authorize sport hunting of a non-experimental, threatened species unless, as the Act's definition of "conservation" specifies, extraordinary population pressures cannot otherwise be relieved. That narrow prohibition will have virtually no impact on sport hunting in the United States because most hunted species do not face the threat of extinction within the foreseeable future. For a species that does, however, and is thus listed as threatened, the original drafters of the Act properly concluded that sport hunting of it would not be an objective of its conservation, but rather a permissible means, in very limited circumstances, of securing its conservation. Absent any new and compelling basis to reconsider that judgment, the conclusion reached in 1973 should be continued.

VI. Other Issues: The Act and Western Water

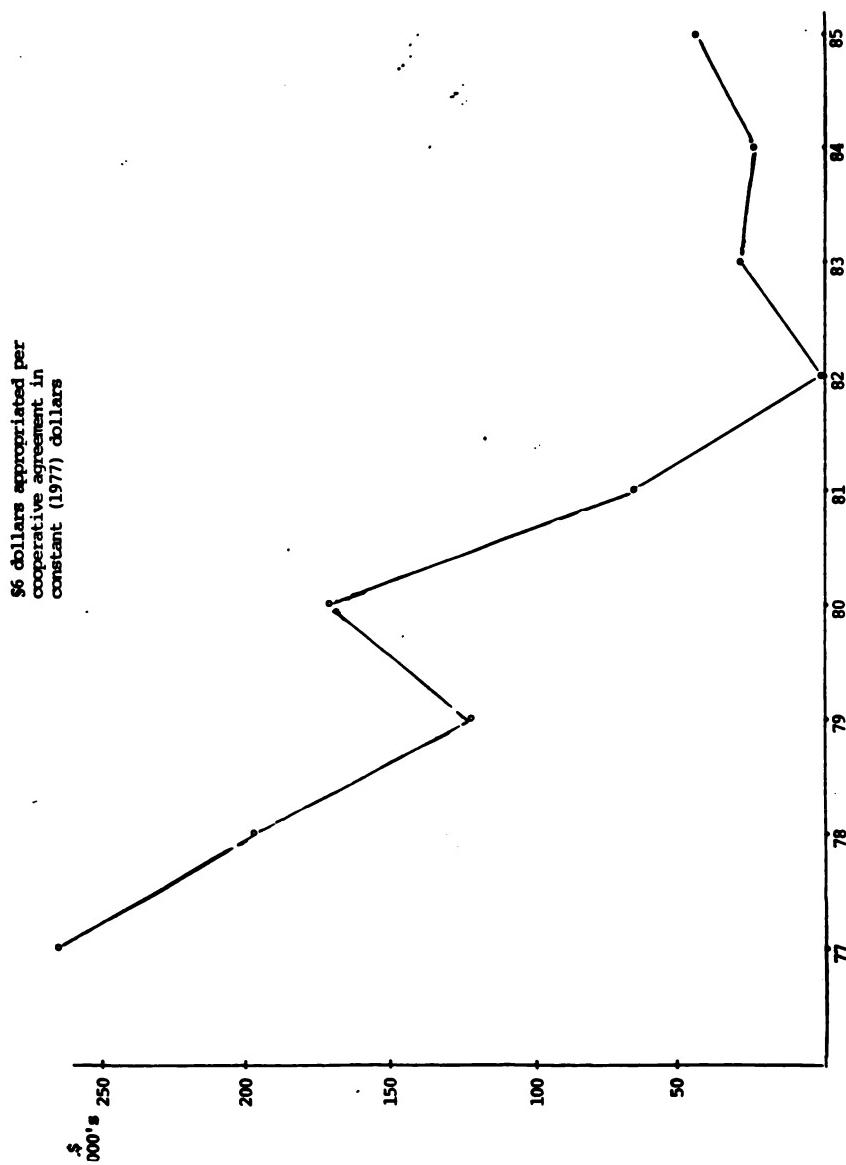
Another issue likely to be raised before the subcommittee concerns the effect of Section 7 of the Act upon federally

authorized or funded water projects in Western states in which the "prior appropriation" doctrine prevails. The complaint of certain Western water users is that under their state laws they may own the right to withdraw or consume a specified quantity of water yet be unable, because of Section 7, to secure the necessary federal permits to construct the dams or other diversion facilities that would facilitate the exercise of those rights. In this respect, however, it is clear that Section 7 treats property rights in Western water no differently than it treats other property rights elsewhere. All are subject to limitation where federal agency approval is necessary for any activity relating to the exercise of those rights.

What is unique about the Western water law scheme is the extraordinary way in which it has been designed to frustrate almost totally any effort to conserve biological resources dependent upon flowing water. No sophisticated understanding of biology is necessary to appreciate the fact that if all the water is taken from a stream, the fish in that stream will perish. Yet, under traditional western water law principles, only those uses of water that result in removal of water from its natural stream are recognized as "beneficial" uses and thus entitled to legal protection. Maintaining in-stream flows, even the minimal amounts necessary to avoid species extinction

or promote other conservation objectives, has not traditionally been considered a beneficial use and thus is not a legally protected use under the state law schemes. Thus, both public and private conservation interests, like the Nature Conservancy, that have so successfully competed in the marketplace to purchase and conserve land, have been legally unable to use the market to acquire water rights necessary to protect fish or other aquatic resources. Although a minority of Western states have recently enacted laws to recognize certain in-stream uses as beneficial water uses, the deck has been stacked so heavily for so long against conservation interests that today's desperate plight of many western fish species has been made inevitable. Absent some very fundamental reform in the state legal schemes that have created this dire situation, the limited handle of Section 7 of the Endangered Species Act remains the only significant safeguard against species extinction.

ATTACHMENT 1



ATTACHMENT 2

Set forth below are the estimates of budgetary needs for the federal endangered species program based upon realistic objectives that would represent achievement of the goals of the Endangered Species Act.

LISTING

goal: finish listing action on current backlog of 1019 category 1 candidate species in next ten years
cost: assumes same cost per newly listed species as prevailed in 1984

5.75M/yr

goal: complete status surveys on current backlog of 2711 category 2 candidate species in next ten years
cost: assumes current year cost of approximately \$6,000 per species and further assumes no new candidate species

1.60M/yr

goal: list one-fourth of current backlog of 2711 category 2 candidate species in next ten years
cost: assumes same cost per newly listed species as prevailed in 1984

3.85M/yr

TOTAL ANNUAL LISTING NEEDS OVER NEXT DECADE IN CURRENT DOLLARS

11.2M/yr

RECOVERY

goal: to prepare in the next ten years initial recovery plans for all newly listed species and currently listed U.S. species without plans
cost: assumes same cost per initial recovery plan (\$3,000) as prevailed in 1984

5.50M/yr

goal: to revise all recovery plans quinquennially
cost: assumes current average plan revision cost of \$2,000 per revision

4M/yr

goal: to continue or begin implementation of existing recovery plans and to begin implementation of all new plans

cost: lower figure assumes same relationship of recovery plan implementation costs to number of listed U.S. species as currently prevails; higher figure represents accelerated implementation to accomplish recovery objectives

6.2M-12.4M in FY86
8.4M-16.8M in FY87
10.5M-21.0M in FY88

TOTAL ANNUAL RECOVERY NEEDS IN CONSTANT DOLLARS

15.7M-21.9M in FY86
17.9M-26.3M in FY87
20.0M-30.5M in FY88

STATE GRANTS

goal: to return to 1977 levels of federal funding per cooperative agreement, adjusted for ensuing inflation

cost: assumes no new state cooperative agreements and makes no upward adjustment for newly listed species

25.7M/yr

CONSULTATION:

goal: to be able to respond to all consultation requests for all species over next ten years

cost: assumes same relationship of total consultation costs to number of species listed as prevails currently

3.9M in FY86
5.3M in FY87
6.6M in FY88

LAW ENFORCEMENT

goal: to improve forensic abilities, better implement CITES permit requirements, and provide effective law enforcement capability for an expanding list of protected species

cost: 8.3M/yr

RESEARCH AND DEVELOPMENT

goal: to provide an effective research capability for an expanding list of protected species

cost: 5.2M/yr

goal: to continue or begin implementation of existing recovery plans and to begin implementation of all new plans

cost: lower figure assumes same relationship of recovery plan implementation costs to number of listed U.S. species as currently prevails; higher figure represents accelerated implementation to accomplish recovery objectives

6.2M-12.4M in FY86
8.4M-16.8M in FY87
10.5M-21.0M in FY88

TOTAL ANNUAL RECOVERY NEEDS IN CONSTANT DOLLARS

15.7M-21.9M in FY86
17.9M-26.3M in FY87
20.0M-30.5M in FY88

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goal: to return to 1977 levels of federal funding per cooperative agreement, adjusted for ensuing inflation

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3.9M in FY86
5.3M in FY87
6.6M in FY88

LAW ENFORCEMENT

goal: to improve forensic abilities, better implement CITES permit requirements, and provide effective law enforcement capability for an expanding list of protected species

cost:

8.3M/yr

RESEARCH AND DEVELOPMENT

goal: to provide an effective research capability for an expanding list of protected species

cost:

5.2M/yr

WESTERN HEMISPHERE

goal: to take advantage of international conservation opportunities identified as a result of 1982 directive to begin implementation of Western Hemisphere Convention

cost: 0.4M/yr

ENDANGERED SPECIES COMMITTEE

goal: to insure no diminishment in constant dollar terms of resources necessary to consider exemption requests

cost: 0.8M/yr

NMFS PROGRAM

goal: restore research programs for bowhead whales, Hawaiian monk seals, and sea turtles; begin systematic inventory of potential candidates for listing among marine species

cost: 7.0M/yr

AGRICULTURE PROGRAM:

goal: to provide effective trade enforcement capability for a substantially expanded list of plant species

cost: 3.0M/yr

TOTAL PROGRAM NEEDS FOR FY86 81.16M - 87.36M

FY87 84.76M - 93.16M

FY88 88.16M - 98.66M

Recapitulation by agency for FY86:**Fish and Wildlife Service**

listing	11.2M
law enforcement	8.3M
consultation	3.9M
recovery	15.7M-21.9M
R & D	5.2M
state cooperation	25.7M

Endangered Species Committee 0.8M

Dept. of Interior (Western Hemisphere) 0.4M

National Marine Fisheries Service : 7.0M

Dept. of Agriculture : 3.0M

STATEMENT OF WES HAYDEN, LEGISLATIVE COUNSEL,
INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE
AGENCIES, TO SENATE ENVIRONMENTAL POLLUTION SUBCOMMITTEE
REGARDING REAUTHORIZATION OF THE ENDANGERED SPECIES ACT
16 APRIL 1985

Mr. Chairman: It is always a pleasure to come before this subcommittee on behalf of the International Association of Fish and Wildlife Agencies to share with you the organization's views on matters of mutual interest and concern.

And that certainly applies in the case of the issue before you this morning--reauthorization of the Endangered Species Act as proposed in S 725.

As I am sure you are aware, the Association has consistently supported this legislation and its underlying objectives since its inception in 1973. We worked for its enactment then, and we have in the intervening years pressed just as vigorously for adoption of those changes which we perceived as necessary to make the program more workable and effective as a tool for insuring the survival and well-being of animal and plant species facing the possibility of gradual extinction without such measures.

In our judgment the amendments adopted in the 1982 reauthorization contributed very significantly to that objective.

From a state perspective the most important of those changes included:

... A legislative over-ride of the U.S. Court of Appeals decision on bobcat population data.

... Protection of state prerogatives in the introduction of experimental populations and in the designation of critical habitat.

... Clarification of Section 8 provisions regarding "no detriment" determination authority for states in management of Appendix II species.

... An increase in the federal share of grants under Section 6, to 75 per cent.

And we see in S 725 the potential for substantial additional gains for the program if it is enacted and implemented in the form proposed and if some recently emerging problems can be effectively resolved in the process.

Before turning to that issue, however, let me stress our full endorsement of the two primary features of your bill--the five-year reauthorization period and the provision for an increase in Section 6 funding from \$6 million to \$10 million in each of the last two years.

Those features will provide a better base for long-range state program planning and will still provide the opportunity for amendment of the act at any time during the period, should the need arise, without going through the time-consuming and costly process of full-scale reauthorization review every two or three years.

And I would submit that, with steadily increasing state involvement in the endangered species initiative, long-range planning and some reasonable assurance of adequate funding is more than ever essential to its continuing success and effectiveness.

Given the history of fluctuating Section 6 allocations over the past few years, ranging from an annual figure of \$2 million to \$4 million-- it is a testimonial to state commitment to the program that 42 of them still maintain cooperative agreements with the Fish and Wildlife Service for endangered species activities.

One explanation is that 26 of those states are among the 32 which now operate some form of income tax check-off system to fund non-game program activities and so are able to use some of that money to help finance their endangered species efforts as well.

It may be appropriate to note at this point that the Non-Game Act of 1980, now up for reauthorization, has never been funded, despite a \$5 million a year authorization, and that one of the issues to be considered in hearings on the bill this week will be development of other potential sources of financing for that program.

There is, however, another facet of the current endangered species situation which we find quite disturbing and which we feel impelled to bring to your attention in the context of this hearing.

It arises from two recent decisions of the Eighth Circuit Court of Appeals which, while dealing with separate issues, seem to us in combination to have the potential for undermining the basic conservation objectives of the ESA.

The first ruling, handed down in early January in the Dion case, held that Indians could kill endangered species (in this instance bald eagles) without penalty on reservation land--the only restriction being that parts of these trophies could not be sold for profit.

Effect of that decision was to say that treaty rights for hunting took precedence over any limitation imposed by the Endangered Species Act.

The same court took an entirely different tack a month later in the Minnesota wolf case.

It ruled out the trapping of grey wolf in specified areas of that state, a program recommended by the Eastern Timber Wolf Recovery Team, in a decision which at the same time sharply restricted the discretionary authority of the Secretary of the Interior and that of the states for regulated taking of threatened species. It held that there could be no such taking for conservation purposes--only in extraordinary conditions to relieve population pressure.

Beyond the wolf situation in Minnesota, our immediate concern about this decision is its implications for long-term preservation of the grizzly bear in Montana, where hunting of the species is now conducted on a limited basis as part of the state's management strategy. The result of those efforts up to this point has been maintenance of the only prospering grizzly population in Lower 48.

We feel strongly that management programs of this type are justified and should not be jeopardized.

Aside from the immediate impact of the court action, however, there is also the prospect of long-range damage which could follow.

The decision in the Minnesota case misconstrues the provisions for differing levels of protection afforded endangered and threatened species under the statute and in the process ignores an administrative understanding of that section of the Act which has prevailed since its enactment in 1973.

Unless reversed, its effect could spread to other areas than those already impacted and could seriously impair the future effectiveness of the ESA program.

For that reason we strongly recommend attention to this problem and its resolution by appropriate amendment during the reauthorization process.

Other than in this area we fully support S 725, as proposed, commend its sponsors and urge its timely adoption.

Thank you for attention to our views.

Wildlife Management Institute

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Statement of Lonnie L. Williamson
before the
Subcommittee on Environmental Pollution
Senate Committee on Environment and Public Works
on Endangered Species Act Reauthorization (S. 725)
April 16, 1985

Mr. Chairman:

I am Lonnie L. Williamson, secretary of the Wildlife Management Institute, which is headquartered in Washington, D.C. Initiated in 1911, the Institute's program is dedicated solely to the improved management of renewable natural resources.

The Institute is pleased to have been involved in developing the Endangered Species Act, and in supporting it since enactment. We continue to believe that the program is an important segment of our national wildlife conservation effort, providing it is not abused by misrepresentation of its purpose. We endorse the purposes of S. 725, and urge that the subcommittee expedite reauthorization of the Act. However, we urge the subcommittee to take notice of two recent court decisions that unduly restrict the authority of the U.S. Fish and Wildlife Service and state wildlife agencies and that are arguably not in the best interest of wildlife that the Act is intended to help.

On February 19, 1985, the U.S. Eighth Circuit Court of Appeals prohibited the Interior Department and the Minnesota Department of Natural Resources from implementing a management plan for wolves in the northern part of that state. The plan called for trapping excess wolves in certain areas to control livestock depredations and relieve other concerns of landowners and other residents bordering the wolf's range. Although the Endangered Species Act clearly intended

to give the Interior Secretary authority to allow such limited taking of a threatened species under certain conditions requiring professional determination, the Court ruled otherwise. According to some observers, this decision may soon be applied to the tightly controlled taking of grizzly bears in Montana.

We suggest that the subcommittee seriously consider amending the Act to overcome this apparent misinterpretation of the law by the Eighth Circuit. I trust that committee members agree with the principle that agencies and individuals legally responsible for wildlife and who are most knowledgeable about wildlife should be making these critical decisions rather than the courts.

People must realize that creatures like the grizzly and wolf, which are and always have been subject to great misunderstanding, persist, in part, because their presence is accepted in our society by those persons who reside along the margin of the animals' ranges. If these persons find there is no legal way to relieve their concern regarding property and public safety, then a point will be reached where people will take matters in their own hands, and to the detriment of these magnificent animals.

Another U.S. Eighth Circuit Court of Appeals decision in early January of this year states that Indians may kill endangered species and any other wildlife they choose on reservation lands. This ruling is either a blatant disregard for endangered wildlife by the court, or a clear signal that the Endangered Species Act is inadequate.

The U.S. Fish and Wildlife Service arrested a number of Indians last year for killing more than 200 bald eagles in South Dakota and Nebraska. The defendants also were charged with selling parts of the birds as native American artifacts.

A federal court convicted the Indians of the taking and selling charges. Four of the Indians subsequently appealed their conviction to the Eighth Circuit which reversed part of the lower court's decision.

By a 5-3 vote, the appeals court said that the Indians have treaty rights to hunt on reservations as they please. This, the court said, includes the right to kill endangered species or any other form of wildlife. However, the court said, Indians do not have the right to sell any parts of the animals, thus the lower court's conviction for selling the artifacts will stand. The appeals court indicated that the only way to stop Indians from killing endangered species or other wildlife at will is to amend the applicable treaties to that effect.

The outdated treaties that this country signed with various Indian tribes years ago have become a serious threat to fish and wildlife resources in many parts of the nation. The subcommittee, I am sure, is well aware of the problem. Although it surely is a sensitive area to broach, something must be done. And we believe that the Endangered Species Act is a good place to start. Therefore, we recommend that the subcommittee consider an amendment that would allow state and federal wildlife agencies to prohibit Indians, as well as anyone else, from taking endangered or threatened species.

Mr. Chairman, these two court decisions not only restrict managers' ability to conserve endangered species, they breed contempt for the law among the general populous that under reasonable circumstances would support it. We hope that the subcommittee will help solve these issues. And we appreciate the opportunity to express our views on this subject.

99TH CONGRESS
1ST SESSION

S. 725

To authorize appropriations to carry out the Endangered Species Act of 1973 during fiscal years 1986, 1987, 1988, 1989, and 1990.

IN THE SENATE OF THE UNITED STATES

MARCH 20 (legislative day, FEBRUARY 18), 1985

Mr. CHAFFEE (for himself, Mr. STAFFORD, Mr. DURENBERGER, Mr. BENTSEN, Mr. MITCHELL, and Mr. WARNEE) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

A BILL

To authorize appropriations to carry out the Endangered Species Act of 1973 during fiscal years 1986, 1987, 1988, 1989, and 1990.

- 1 *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*
- 2 That section 15 of the Endangered Species Act of 1973 (16
- 3 U.S.C. 1572) is amended by—
- 4 (a) amending paragraph (1) of subsection (a) by
- 5 striking “and 1985” and inserting in lieu thereof
- 6 “1985, 1986, 1987, 1988, and not to exceed
- 7 \$33,750,000 for each of fiscal years 1989, and 1990”;

- 1 (b) amending paragraphs (2) and (3) of subsection
2 (a) by striking "and 1985" each place it appears and
3 inserting in lieu thereof "1985, 1986, 1987, 1988,
4 1989, and 1990";
5 (c) amending subsection (b) by striking "and
6 1985" and inserting in lieu thereof "1985, 1986,
7 1987, 1988, and not to exceed \$10,000,000 for each
8 of fiscal years 1989, and 1990"; and
9 (d) amending subsections (c) and (d) by striking
10 "fiscal year 1985" and inserting in lieu thereof "each
11 of fiscal years 1985, 1986, 1987, 1988, 1989, and
12 1990".

ENDANGERED SPECIES ACT AUTHORIZATIONS

THURSDAY, APRIL 18, 1985

**U.S. SENATE,
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
*Washington, DC.***

The subcommittee met at 10:43 a.m., in room SD-406, Dirksen Senate Office Building, Hon. John Chafee (chairman of the subcommittee) presiding.

Present: Senators Chafee, Symms, and Mitchell.

Senator CHAFEE. Ladies and gentlemen, I apologize. These are busy days. The Secretary of State was over briefing all the Senators on Nicaragua and hence the delay. I had a question to ask of him and I was 14 and they stopped at question 12, as I patiently waited.

Mr. Jantzen and Mr. Roe, why don't you proceed, on this the second day of the endangered species hearing.

STATEMENT OF ROBERT JANTZEN, DIRECTOR, U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR

Mr. JANTZEN. Mr. Chairman, since 1973, the Congress has enacted a number of amendments designed to make the Endangered Species Act more effective and, at the same time, to increase its flexibility for responding to potential problems. These changes, along with internal administrative improvements, have resulted in a program that is running more efficiently and cooperatively now.

The Department of the Interior is requesting a 4-year reauthorization of the act, without substantive amendments. In general, we recommend an authorization during fiscal year 1986 of \$23 million to the Department of the Interior for administration of the act and \$4 million for grants to States. These amounts would provide for the continuation of our endangered species activities at current levels. We are also recommending that such sums as may be necessary be authorized in the subsequent 3 fiscal years.

The process by which animals and plants are listed was expedited by the Congress in 1982 and revised regulations implementing those changes are now in place. As a result, the listing rate has steadily increased.

During 1984, a total of 46 animals and plants were placed on the list. Another eight have been added since the beginning of 1985, and we expect a high total for this year due to the large number of listing proposals now under consideration.

As the numbers of listed species increase each year, so do the numbers of section 7 consultations. It is usually possible to resolve

potential problems and obviate the need for a formal consultation, particularly when the Federal agency involved initiates informal consultations at an early stage in the planning process. The number of informal consultations has increased on the average of about 40 percent annually since 1979 while the total number of formal consultations has decreased substantially.

Our increased emphasis on recovery is reflected in the more than 50 recovery plans that were approved during 1984, about one-third of the plans that have been approved since passage of the act. The difficult task of recovering a listed species is one that is too large for any single agency; a coordinated recovery program involving Federal, State and private interests is usually necessary. Such an approach has been initiated through the Interagency Grizzly Bear Committee which coordinates research, management, law enforcement and funding for conservation of that species in the lower 48 States.

Another recovery program requiring a coordinated effort is that for the southern sea otter. One of the major threats to this population is the possibility of an oil spill along the central California coast, and one way to reduce the threat would be to establish a reserve colony.

We are currently considering a research project involving the translocation of a small number of otters to evaluate the feasibility and effects of establishing and containing a new population within a specified area. The Service is in the process of preparing an EIS with the assistance of an Interagency Project Review Team and with active involvement from interested conservation, oil and gas, and fishing groups.

In addition, in conjunction with any decision to proceed with such a translocation, the Service proposes to promulgate special regulations under ESA section 10(j) which authorizes establishment of experimental populations. This should help to address concerns about the economic and other impacts of translocation, especially on offshore oil development and military activities.

The other major issue concerning the sea otter is accidental drowning in nearshore commercial fishing nets. The Service has worked very closely with the State of California to restrict fishing activity in a way that would stop the entanglement. In January, the California Department of Fish and Game invoked a temporary closure of the fishery within the otter's range. A bill now moving through the California legislature would close the otter's range permanently to large mesh gill and trammel nets.

As you can see, the success of conservation and restoration efforts for listed species can depend in large part on maintaining a good working relationship with our counterparts in the States. Under the authority of section 6, the Fish and Wildlife Service has reached final cooperative agreements with 44 States and territories. All States with approved cooperative agreements may apply for matching grant-in-aid funds. In fiscal year 1985, 146 separate projects in 37 States were funded out of the \$4 million appropriated by the Congress.

Mr. Chairman, there are a couple of issues that we feel should be brought to your attention as matters of potential concern. One involves the enforcement of laws to protect bald eagles. In January,

the Eighth Circuit Court of Appeals ruled in *United States v. Dion*, holding that the noncommercial taking of endangered or threatened wildlife by an Indian on the Yankton Sioux Reservation is a legitimate exercise of treaty rights, exempt from prosecution under various Federal statutes protecting wildlife. In terms of the protection and conservation of endangered and threatened species like the bald eagle, the decision could have serious implications. We have requested that the Department of Justice seek review of this ruling by the U.S. Supreme Court.

Another subject of concern is the Minnesota wolf situation. Regulations published in 1983 for transferring primary management authority to the State contained a provision allowing for limited sport trapping, as recommended by the recovery team. However, the U.S. District Court issued a ruling that prevents implementation of a wolf trapping season, a decision that was recently upheld by the court of appeals. We believe that this case forecloses a management option of potential value, but that further study is needed before a possible legislative remedy can be recommended.

Mr. Chairman, that completes my short presentation. I would be happy to answer questions.

Senator CHAFEE. We have your full statement here, Mr. Jantzen. That will be helpful to us.

You referred to the Justice Department's Dion decision. What have you heard back? What have they said about it?

Mr. JANTZEN. We have not heard whether Justice is going to go forward with a writ or not. Mike Young from the Solicitor's Office is here, Mr. Chairman. I can ask him more specifically.

Senator CHAFEE. It seems to me that the clearest way, if we can do it, and I don't know why we can't do it, is if we specifically pass legislation that said the Endangered Species Act applied to Indian reservations, that would clear it up, wouldn't it?

Mr. YOUNG. Legislation could clear up the question.

Senator CHAFEE. I understood the decision, the problem was that they said that the statute wasn't clear on it. If the statute had been clear, then that killing of the eagles would have been prevented; isn't that so?

Mr. YOUNG. That is true, Senator. The Eighth Circuit Court of Appeals, in effect, found there was no explicit determination when the Endangered Species Act was passed that would show an explicit inclusion of Indians under that act.

Senator CHAFEE. OK. Now, Mr. Jantzen, there has been a good deal of criticism by past witnesses who have been through here that you are just not proceeding with your listing fast enough. You cite what you have done, but your critics would say that is fine, but it is not enough. What do you say to that?

Mr. JANTZEN. Mr. Chairman, I think that our record, particularly last year, and what we plan to establish this year, is a good one. We had listing of more than 40 species last year. We plan to meet that target again this year.

We do work on a priority basis, no question about it. But to simply say that we are not doing enough, I don't think answers the issue. I am confident that those species that we have listed, and that we propose for listing, are those that are most in need of listing consideration at that time.

In addition, we have the emergency listing provisions which we have exercised in the past, so that if something comes up we are not aware of, we can act quickly.

Senator CHAFEE. Let's take 1983, or if you have your figures for 1984, how often did you use the emergency provision, do you know?

Mr. JANTZEN. Yes, sir, we can get that answer.

I can give you the emergency listings since May of 1982. We listed the Ash Meadows speckled dace at that time.

Senator CHAFEE. Without the names. Just how many times?

Mr. JANTZEN. Five species, in addition to the Ash Meadows speckled dace, were the subjects of emergency listings.

Senator CHAFEE. Mr. Bean who testified here Tuesday—

Mr. JANTZEN. I am sorry, sir; altogether, six species have been the subjects of emergency listings.

Senator CHAFEE [continued]. Said since 1973, and that is 12 years ago, the list of threatened and endangered species has grown by about 429 species, an average of 39 a year. That is the listed ones. Yet, the Fish and Wildlife Service has identified within the United States alone more than 1,000 additional species for which it already has sufficient information warranting proposals to add them to the list.

Now I don't know what it means, warranting proposals.

Such proposals cannot be made currently, however, because of inadequate resources. If this backlog of category I candidate species is to be handled at a rate equal to the historical rate average, more than a quarter of a century will be needed just to extend protection to those species already known to need protection now.

Now, I am not quite sure. He seems to be suggesting that you have these thousand additional species for which Fish and Wildlife has sufficient information warranting proposals to add them to the list. I don't know what that means. Does that mean they should be added or they should be looked into?

I am asking you to interpret Mr. Bean's language, so I am putting you at somewhat of a disadvantage.

Mr. JANTZEN. The way I understand the category I list is what he is talking about, I believe. On the candidate list we publish and then revise from time to time, category I species are those we feel we have sufficient information to consider through a proposal process.

Now, category II species are those for which we do not have sufficient information to elevate them to that step.

Senator CHAFEE. Let's just take the category I. What has been your experience of the category I? What percentage of the category I, that you then look into more thoroughly are eventually added to the list? Is it 70 percent or is it 30 percent?

Mr. JANTZEN. Mr. Chairman, Mr. Spinks, Chief of the Office of Endangered Species advises me most of them are added.

Senator CHAFEE. So it would be in the high part. So Mr. Bean has a point here when he says there are a thousand of these category I. We will say 85 percent. So there is 850. I think based on that we can say you have a backlog of 850.

I suppose this was before we even got into the plant business.

Mr. JANTZEN. Mr. Chairman, if I could, in that category I figure of 1,118 species, 1019 of them are plants.

Senator CHAFEE. All right. Now this is just, he says, from within the United States alone. I presume in that he has Alaska and Hawaii, but clearly you wouldn't have Guam. We had some testimony of what we had in Guam the other day.

Mr. JANTZEN. Yes, sir, it does include Guam and the territories.

Senator CHAFEE. It would include Guam?

Mr. JANTZEN. Yes, sir.

Senator CHAFEE. In other words, wherever you can list.

Mr. JANTZEN. Yes, sir.

Senator CHAFEE. Last year, during 1984, examples of 46 were added. You are up to eight so far. We expect a high total for this year. What would be a high total?

Mr. JANTZEN. That would be 40-plus, sir. I will have to ask Mr. Spinks again.

Senator CHAFEE. Let's say 50, maybe? Do you think you can do 50?

Mr. JANTZEN. The answer is 80.

Senator CHAFEE. You are really kicking it up here. All right, 80. Eighty into 850, that is 10 years.

So now what do you need? Not that we can necessarily provide it, but I mean if you had more resources, presumably you could go faster. Is that true?

Mr. JANTZEN. I think basically that is true in the program, up to a point. I think you reach a point of diminishing returns. But perhaps we could accelerate that to some extent.

Senator CHAFEE. All right. Mr. Roe, please.

STATEMENT OF RICHARD ROE, DIRECTOR, OFFICE OF PROTECTED SPECIES AND HABITAT CONSERVATION, NATIONAL MARINE FISHERIES SERVICE

Mr. Roe. Mr. Chairman, I know that time is rather precious today. I would like to ask your permission to summarize my testimony and submit it in full for the record.

Senator CHAFEE. That would be fine.

Mr. Roe. I appreciate the opportunity to offer the views of the Department of Commerce on the Endangered Species Act of 1973. This act is vital to the conservation of species of fish, wildlife, and plants that are threatened or endangered with extinction.

The Department of Commerce has jurisdiction under the act over marine fish, turtles, seals, porpoises, and whales that are threatened or endangered with extinction. Our efforts are focused on three areas: listing, consultation and recovery. Please permit me to briefly summarize each.

We view the listing process under section 4 as one of the most critical elements of the act because it sets in motion protective measures, including consultation and recovery. The Fish and Wildlife Service and the NMFS have published joint final regulations implementing the 1982 amendments to section 4, that establish criteria and procedures for determining whether species are endangered or threatened, designating critical habitat, receiving and considering petitions, and conducting status reviews of species listed as endangered or threatened.

We have completed the 5-year status reviews of most species listed under our jurisdiction, and based on these reviews, we have concluded that the gray whale should be listed as threatened rather than endangered—which I think is a tribute to the success of the act—the western North Atlantic population of olive ridley sea turtles should be listed as endangered rather than threatened, and the Caribbean monk seal should be removed from the list because it is extinct.

All other species reviewed are listed properly. We expect to propose the listing changes I have mentioned during the coming year.

With regard to consultation, section 7 of the act requires all Federal agencies, in consultation with the Secretaries of the Interior and Commerce, to ensure that their actions are not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of the critical habitat of such species. I believe that the consultation process has worked well for Federal actions affecting listed marine species.

Although Federal authority and responsibility under section 7 have remained virtually unchanged since 1973, amendments to the act have made significant procedural changes in the section 7 consultation process. In 1983, the Fish and Wildlife Service and NMFS published proposed regulations that would implement these amendments. Final regulations are being cleared by both agencies.

Although this has been a time-consuming process, we believe that our response to the numerous issues and concerns raised have resulted in regulations that streamline the consultation process and clarify agency responsibilities under section 7.

As to recovery, we believe the act's goal is to recover listed fauna and flora to the point where protective measures are no longer necessary for their general health and welfare. To that purpose we have developed and implemented recovery plans for the critically endangered Hawaiian monk seal and the six species of sea turtles found in the Atlantic. At present we are developing a Pacific sea turtle recovery team which will prepare a recovery plan for that area.

The Hawaiian monk seal recovery plan includes research to assess the status and trends of the population, a head start program for monk seal pups, and a program to reduce the adverse impacts of male seals on females and immature seals where sex ratios have become imbalanced.

Our efforts to recover sea turtles include research as well as the development and promotion of the trawling efficiency device, or TED, that excludes about 97 percent of all sea turtles that are taken in the shrimp fishery while increasing the shrimp catch as much as 7 percent in some areas.

In addition, we have participated with the Government of Mexico, the Fish and Wildlife Service, National Park Service and State agencies in a head start program for the Kemp's ridley sea turtles.

Our whale recovery efforts are focused primarily through participation in the International Whaling Commission, although domestically we have exercised our responsibilities through the section 7 process. Our other international efforts include assisting the De-

partment of the Interior in administering CITES [the Convention on the International Trade in Endangered Species of Wild Fauna and Flora], and we are participating in the Western Atlantic Turtle Symposium and the Wider Caribbean Sea Turtle Conservation Network.

We strongly believe that sea turtle conservation is an international program and will succeed only with international efforts.

The 1982 amendments to the act provided a 3-year extension of the certificates of exemption which allow the sale, export, and interstate commerce of certain preact endangered species parts. NMFS has written regulations to put this extension into effect. These regulations impose additional restrictions on the conditions under which certificate holders may dispose of their inventories and require certificate holders to keep more detailed records and to provide NMFS with quarterly reports of their activities and inventories.

The 1982 amendments also added a provision to the act authorizing the Secretary to issue permits to take endangered species incidental to an otherwise lawful activity, provided such taking will not appreciably reduce the likelihood of the survival and recovery of the species and that the applicant will implement conservation measures to mitigate any impacts of such takings.

NMFS is developing regulations to implement these amendments and anticipates publishing a proposed rule later this year. Permits issued under these regulations could be used to allow commercial and recreational fishermen and others to conduct their activities without risk of prosecution for incidentally taking certain endangered species. We believe that this process will contribute to the acquisition of valuable information on endangered species taken incidentally to these activities.

In conclusion, Mr. Chairman, I believe the act has worked well with respect to marine species. We urge that the act be reauthorized for a period of 4 years.

I thank the committee for the opportunity to appear today and would be pleased to answer any questions.

Senator CHAFEE. Gentlemen, I take it from your testimony that both of you are just asking for a 4-year reauthorization of the existing act with no changes; is that correct?

Mr. JANTZEN. Yes, sir.

Mr. Roe. That is correct.

Senator CHAFEE. All right. What is the story, Mr. Roe, on the opening of the U.S. market to sea turtle products? We are getting a host of mail on the matter of commercial marketing of turtles. Apparently some of these turtles have been grown on turtle farms. Are you familiar with that at all?

Mr. Roe. Yes, I am. That goes back to 1978 when we listed the sea turtles. At that time, there was a contentious issue over whether products from sea turtle mariculture or ranching operations should be allowed to be imported into the United States.

The final rules that we and the Fish and Wildlife Service jointly published prohibited the import of those products. We were concerned at that time for sea turtles in the Caribbean particularly. There was in existence a sea turtle farm on Grand Cayman Island, which still exists. It was then in private ownership. Now it is in the

ownership of the government. Since then, the Cayman Islands government has prepared ranching under CITES, which would permit trade in the products if accepted by the parties to CITES.

I expect, and perhaps Mr. Jantzen can elaborate, that particular proposal to be presented at the conference of the parties to CITES which is, I believe, convening next week. If accepted by the parties, and the United States is a party to CITES, the United States must consider whether to accept ranned turtle products into the United States, which would be legal under CITES.

At this time, we and the Fish and Wildlife Service are looking at draft regulations that would implement the CITES mandate if it is so accepted.

Senator CHAFEE. I suppose the problem is twofold. One, if these turtles are being bred and brought in here, pretty soon the illegal taking of the turtles will blend in with these turtles from the so-called turtle farm and the unsuspecting purchaser won't know one from the other. That encourages the illegal importation of a species that is endangered.

Mr. ROE. I think that is a genuine problem. Under the CITES requirements, a ranching proposal must have very explicit marking and tagging methods so that their products, products from that ranch, can be tracked in trade.

I have personally looked at the Cayman Island proposal and I think that, in fact, it meets the CITES requirements.

That is not to say that we may not have a potential for enforcement problems down the line should that proposal be accepted.

Senator CHAFEE. Suppose it meets the CITES requirements. Are we duty bound then to admit those products into the United States?

Mr. ROE. I think under CITES, and Mr. Jantzen can correct me, this is really his world of responsibility; as I understand the convention, the United States as a party can, in fact, have more prohibitive regulations than under the convention.

Am I correct in that?

Mr. JANTZEN. Yes.

Mr. ROE. So to answer your question, Mr. Chairman, the United States could elect to prohibit ranch products, even though there was an accepted ranching proposal. I think that is a policy decision.

Senator CHAFEE. This is my first encounter with this so I am hardly in a position to offer advice, but I would hope that you would be very cautious because, without knowing the details, I can see a lot of problems with it.

Mr. ROE. Our agency is very concerned because we have been working for a number of years with the shrimp industry in the southeast. We would not want to jeopardize the good rapport we have developed down there.

Senator CHAFEE. OK. Thank you very much, gentlemen. I appreciate your coming.

Mr. JANTZEN. Thank you.

Mr. ROE. Thank you.

Senator CHAFEE. The next panel is Dr. Tom Cade, president of the Peregrine Fund; Mr. Frank Bond, North American Falconers Association; Mr. Robert Berry, president, North American Raptor

Breeders Association; and Mr. James Leape, counsel for wildlife programs, National Audubon Society. Why don't you take your positions.

Gentlemen, why don't we proceed. Everybody will have close to 5 minutes. Go ahead, Mr. Cade.

STATEMENT OF TOM CADE, PRESIDENT, PEREGRINE FUND, INC.

Mr. CADE. Thank you very much, Mr. Chairman. I appreciate the opportunity to appear to comment on the reauthorization of the Endangered Species Act, and particularly the so-called raptor exemption which came in with the amendments in 1978.

I speak for the Peregrine Fund, which is a nonprofit, publicly supported organization which we formed more than 10 years ago to aid in the recovery of the peregrine falcon primarily through breeding birds in captivity and releasing the captive-produced falcons in the wild.

Since 1975, the fund has raised and released to the wild more than 1,400 young peregrine falcons, and we have also been intimately involved in all other aspects of the North American recovery efforts to conserve this species in nature, including some of the very early work done on pesticide analysis and monitoring, population surveys, manipulating the reproduction of wild pairs, and also including some field assistance with law enforcement activities in Alaska and Canada. Consequently, I believe our organization is in a good position to evaluate the practical day-to-day workings, let's say, of programs supported under the authority of the Endangered Species Act.

We are here, by the way, to support the reauthorization of the act as it currently exists, including all of the 1978 amendments that were attached to it at that time.

One of the things I would really like to point out to you, Mr. Chairman, is that the peregrine falcon as a species is in fact making a steady and encouraging recovery in numbers in North America, as a consequence of all the work that has been done on this bird since 1965, which was the year that ornithologists and conservationists finally realized this bird was in dire trouble in both Europe and in North America because of the effects of DDT on reproduction.

The Arctic and boreal populations of Canada and Alaska in fact have increased sufficiently since the low points reached in the mid-1970's so that the so-called tundra race of the peregrine could be down listed from endangered to threatened in 1983.

But even in the United States and Canada where the peregrine was most severely endangered by DDT, the species is beginning to show an increase in the number of nesting pairs. I have provided some details about that in my prepared statement that you can read later.

Senator CHAFEE. Dr. Cade, you have a good statement here. I would move right on to your recommendations.

Mr. CADE. Thank you.

So to summarize, the prognosis of the peregrine in North America is very good if we can just continue along the lines of action that have been specified in the official recovery plans, which, as

you know, are developed under the authority of the Endangered Species Act, particularly as mandated by the 1978 amendments.

Again I would like to say we haven't done all of this on our own, obviously. I would like to acknowledge a couple of the organizations that are with me on the panel here today. The National Audubon Society has helped out in the past, particularly with funding, but I think even more so through what I would call the moral encouragement which they gave us at a very early time when we badly needed recognition in the conservation community. And particularly some of the past directors and officers of that society were helpful. Men like Charlie Callison, Elvis Stahr, and Roland Clement often stood up for us in the past when we needed help.

The North American Falconers Association has also been particularly helpful to us. The falconers made a major practical contribution to the program, which I will speak about more in just a moment, if I may.

So the national effort to restore the peregrine falcon, and other similar efforts for endangered species, owe much of their success to what I would like to think of as the moral or special ethical imperative of the act, which places the responsibility on all segments of American society to do whatever they can to preserve endangered species.

Then let me move on to what we really are here to talk about, Mr. Chairman, which is the raptor exemption.

Senator CHAFEE. You have three points there. You want more funds so that Interior and Commerce can speed up their listing.

Mr. CADE. Yes, indeed.

Senator CHAFEE. You want more funds so that Interior, Commerce, and Agriculture can effect many recovery plans that have been approved but never implemented.

Mr. CADE. Yes.

Senator CHAFEE. Finally, you want more funds to enable the States to build effective endangered species programs to supplement the Federal effort.

Mr. CADE. I would like particularly to emphasize No. 2 because it is all very well to have recovery plans and a list of endangered species, but if we are not going to effect the plans, what is the use of having the plans in the first place?

Senator CHAFEE. Now let's go on to the raptor exemption.

Mr. CADE. This seems to be a cause for concern in some quarters. I would like to address some of those concerns.

As an organization, we supported the exemption in 1978 and we strongly urge its continuance in the reauthorization. It has been stated in some previous testimony, Mr. Chairman, before congressional committees, that the raptor exemption does not benefit wild peregrine populations because falconers and private breeders have made no significant contributions to the captive propagation or to reproduction and that the only important work along these lines has been done by the Peregrine Fund, Inc.

I should like to point out most emphatically, no one in the Peregrine Fund has ever made such a claim, and it simply is not true. There is a whole history behind the idea of breeding peregrines in captivity which goes back to 1965.

From the very onset, falconers were very important elements in considering ways to breed peregrines in captivity in America. They developed the international organization known as the Raptor Research Foundation, Inc., devoted to making sure new information on techniques and methods spread quickly among breeding projects. That was in fact founded by falconers to preserve captive populations.

Our program grew directly out of those early meetings. When I began the work at Cornell in 1970, I had in my own personal possession exactly two pairs of peregrine falcons which had been taken as youngsters from the Colville River in Arctic Alaska—by the way, one of my favorite stomping grounds. If you haven't been there, Mr. Chairman, you should go. It is one of the last great wildernesses on the face of the Earth.

Senator CHAFEE. What is the name of the river?

Mr. CADE. Colville River.

Senator CHAFEE. You said it so fast I can't get it.

Mr. CADE. Colville, C-o-l-v-i-l-e.

Senator CHAFEE. Your time is up, but I will give you another minute.

Mr. CADE. Nearly all the additional breeding stock we were able to garner at Cornell in those first 5 years came from falconers. If it hadn't been for my colleague, Jim Weaver, and his ability to talk his friends into providing those birds to us, we simply would never have been able to do what we set out to do.

I think it is interesting in looking at our records that on the order of 70 to 75 percent of all the peregrines that have been released in the States are the progeny of falconers' birds or they are the progeny of their progeny.

Private breeders have made many contributions to the technology of captive propagation. They provide extra space for surplus birds that the peregrine fund and other institutional programs do not have the facilities to keep.

All of these contributions, Mr. Chairman, by private breeders, and many others that I haven't had time to summarize here, are made possible primarily by this raptor exemption and by the captive breeding regulations promulgated under the Migratory Bird Treaty Act under the exemption. I believe these are powerful arguments for continuing the exemption and the regulations in tact.

If I could have maybe 30 more seconds to say there was one other point that has been made about the raptor exemption and the new captive breeding regulations. That is they make law enforcement to curtail the illegal take of wild birds and falcons virtually impossible and they should be revoked on that account.

I believe that just the reverse argument is the more cogent one, and I have argued that in my prepared statement which I have to leave essentially to you to read at a later time. But just again to point out that peregrine falcons were taken illegally before the raptor exemption, they have been taken illegally since the raptor exemption, they will continue to be taken illegally regardless of what the laws and regulations are in the future.

The way to reduce the illegal take to an acceptable minimum—there is no way just completely to eliminate it in my opinion—but I think we can reduce it to a minimum, first of all, by keeping some

avenues open for legal acquisition, such as we are attempting to do with captive breeding regulations. Second, develop some really effective methods of law enforcement. I could say more on that because I don't think we have seen much of that yet. Third would be to increase significantly the punishment against the professional poachers and trappers found guilty of violating the laws.

Senator CHAFEE. Are you recommending the Saudi Arabian punishment, chop their hands off?

Mr. CADE. That is a good one. The point I was trying to make there, Mr. Chairman, is we can devise punishments that deter crime.

Senator CHAFEE. That is certainly a deterrent.

Thank you. Your time is up. You have a good statement.

There will be a little back and forth, I suspect. Mr. Leape isn't going to agree with you. So let's go to the next witness, Mr. Bond.

STATEMENT OF FRANK M. BOND, NORTH AMERICAN FALCONERS ASSOCIATION

Mr. BOND. Thank you, Mr. Chairman. I am Frank Bond. I am an attorney from Santa Fe, NM.

Senator CHAFEE. Gentlemen, you all know 5 minutes goes pretty fast, if I were you, I would get to the heart of your message as fast as you can because we can't give everybody extensions. We have three witnesses following this group. So go ahead.

Mr. BOND. Thank you, Mr. Chairman.

Then I will summarize from the beginning. We are here in support of Senate bill 725 which reauthorizes the Endangered Species Act. Furthermore, we are here to especially support the exemption as proposed by us and others in 1978, which has effectively reduced some of the paperwork and allowed people to use peregrines that they had in captivity before that time and use the progeny of those peregrines, as a result of the exemption in 1978, which mandated a set of regulations. Those regulations were finally promulgated in July 1983. They represented the most tightly restricted activities, as far as I can determine, under the Migratory Bird Treaty Act.

Mr. Chairman, the act was passed in 1978. The regulations came in 1983. There was 5 years of hiatus there before the regulations were adopted. Finally, the seamless marker, which is the cornerstone of those regulations, to be put on birds was not finally adopted or devised until the fall of 1983. Therefore, the spring and summer breeding seasons of 1984 were the first full period of adoption and implementation of those regulations. In fact, only a few States actually had adopted the State system that coordinates with the Federal system.

Mr. Chairman, we think that the amendment simply hasn't been in effect long enough, only 1 year. We believe that based on that, it ought to continue for the reauthorized period of 4 years, as you suggest.

Further, to go back into the background of what Dr. Cade said, there are a few things we would like to emphasize and then amplify a bit. We think falconers have contributed to conservation, to science, to propagation, for peregrine falcons particularly. The regulations essentially are a Federal-State cooperative closed-loop

system. They establish a uniform national system of procedures whereby, Mr. Chairman, for example, if I wanted to transfer a bird to you, I could not, until you have the proper permits either as a falconer or as a captive propagator.

Senator CHAFEE. Who gives the permits out, the Fish and Wildlife Service?

Mr. BOND. In cooperation with the States, Mr. Chairman. For example, if you were a citizen of a State that did not adopt the Federal regulations, then the full force of them could not be applied by you. But if you and the gentleman to your right were not a permit holder, you couldn't transfer the bird I transferred to you to him. So that is what I mean by closed loop. It is not something we are going to see in pet stores.

In the 1983 regulations, commercialism was adopted as part of those regulations. There have been allegations of large-scale black markets, but as far as we can determine by a recent sting operation by the Fish and Wildlife Service, there is no large-scale black market in the United States. There have been dramatic increases in the population of the peregrine falcons, chiefly due to the abatement of or the ban on organochlorine pesticides and the massive releases by the Peregrine Fund and by private entities.

As Dr. Cade indicated very clearly, the falconers supplied the major portion of the birds for the major project of the Peregrine Fund.

In addition, private breeders are the sole supply of birds for conservation projects in Minnesota for release purposes, for one contemplated beginning this year in Missouri, and for a cooperative agreement that we understand may begin in Illinois. Without the exemption, those conservation programs would die.

Further, we believe that private propagators having peregrines spread out among the many facilities across this country would reduce the possibility of catastrophes, either disease, fire, or destruction because if that occurred at the Peregrine Fund, without recruitment possibilities from these private breeders, the recovery effort might be set back for a decade.

Further, at some stage we contemplate that the big institutional breeders will cease but that there will be some residual use of peregrines for recovery efforts, albeit much smaller. We think this is beneficial because nevertheless, there is still a fragile atmosphere for peregrines out there.

Thank you. I do have more, but I will stop there.

Senator CHAFEE. Fine. I appreciate that, Mr. Bond. That is a good statement.

Mr. Berry.

STATEMENT OF ROBERT BERRY, PRESIDENT, NORTH AMERICAN RAPTOR BREEDERS ASSOCIATION

Mr. BERRY. Yes, Mr. Chairman. My name is Robert Berry. I am an insurance executive. I have been a falconer for nearly 40 years. I am a raptor propagator. I am here today as president of the North American Raptor Breeders Association, which is a trade association established to further the interests of private propagators in North America.

Our organization strongly supports the existence of the raptor exemption as it is currently included in the Endangered Species Act. The regulations implementing the exemption establish uniform standards and procedures for the use of peregrine falcons and other raptors in falconry and propagation, including their purchase and sale.

The cornerstone of that regulation is the seamless band marker as well as stringent reporting and recordkeeping processes.

Now, to review the legislative history of the exemption.

Senator CHAFEE. I will tell you, Mr. Berry, again you know the time limits. If I were you, I would press to your principal points. Maybe you want to review the history.

Mr. BERRY. Well, all right. I will push on, yes.

Senator CHAFEE. I am not trying to dictate what you say.

Mr. BERRY. The Congress mandated certain purposes under the exemption, with one of the main purposes to encourage the propagation of birds of prey in captivity.

I want you to refer to table I of my statement which indicates that in 1981, we had 20 propagators. By 1985, we have 85 propagators who have peregrine falcons in captivity. Now that is a 425-percent increase.

The number of breeding falcons in captivity has increased from 129 to 218. The number of progeny produced has increased from 46 to an estimated 150 birds. Now that estimate is a conservative estimate based on established breeders.

Senator CHAFEE. How many eggs do these birds lay a year?

Mr. BERRY. The normal clutch is four. Generally most people double clutch a bird in order to maximize the production.

Senator CHAFEE. Double clutching a bird?

Mr. BERRY. That means removing the eggs from a bird after the bird lays the first clutch. You remove them and she will recycle in 15 days. This is an important point to remember. There are rigid biological parameters under which birds of prey operate.

Senator CHAFEE. Well, I won't take your time. You go ahead.

Senator MITCHELL. Do you mind if I ask him what that means? He won't ask you what that means, but I will.

Mr. BERRY. OK. I want to get into some of the criticisms by people. Some of the criticisms we undergo are that we shouldn't allow the captive propagation of peregrines because it creates an avenue for people to take these birds illegally out of the wild.

Well, I mentioned rigid reporting and recordkeeping processes. There are two major reporting requirements. You must report the first egg that is laid in a clutch of peregrine eggs and you must report the banding of a young bird, which must be accomplished before 7 to 10 days of age or you simply can't get these seamless bands on the bird's legs. So therefore, you must synchronize or have precise knowledge when the wild bird lays that egg in order to have that young bird available for banding 50 days after the original report to FWS. The rigid parameters I referred to are that a peregrine falcon's egg hatches in 33 days, give or take a day or two, and that a peregrine falcon lays a clutch of four eggs in 7 days. So in essence, you have 7 days laying time, 33 days to hatch and 7 to 10 more days when you have to have that bird banded, for a total of 50 days from the original date reported to the Service. So

the likelihood of being able to synchronize either the taking of wild eggs or wild young out of a wild nest and laundering them into a bogus breeding project is very, very unlikely.

Senator MITCHELL. Thank you very much.

Mr. BERRY. Thank you.

The first goal of the Congress was to encourage propagation. I think that it is very clear that the exemption has encouraged propagators to produce more peregrine falcons and other raptors in captivity.

The second goal was to increase the generic diversity of captive populations. Mr. Chairman, this—holding a large computer print out—is actually a raptor stud book for peregrine falcons and other birds of prey. It is maintained by the North American Peregrine Foundation and is a genetic record to maintain the integrity of the captive bird. It is maintained free of charge by the North American Raptor Propagation Association.

Senator CHAFEE. Your other goal is to encourage the production of raptors for scientific and breeding purposes.

Mr. BERRY. That is right.

Let's go down to conservation. In 1984, 21 of the 85 birds produced in captivity were contributed to the conservation effort, plus another 12 birds that were purchased from Canada, so that is 33 birds from private propagators which went for conservation purposes.

The original seed stock for the peregrine fund was contributed in large measure by falconers. As far as breeding is concerned, we estimate that 50 percent of the 85 birds bred last year and the 67 birds the year before went immediately into captive propagation. So that again, the exemption, as well as its implementing regulations, appear to be fulfilling the goals of the 95th Congress.

It is very important to consider that virtually every bird that is bred in captivity either dies prematurely—and they are not like hothouse plants or help the wild population. They are pretty hearty birds, so most of them live out a normal useful life of about 15 to 20 years. They ultimately are either lost to the wild by falconers or they go into breeding programs, both of which bolster either the wild or captive populations.

Now, let's review actual market prices of peregrine falcons. Our opponents say these birds are worth \$8,000, \$10,000 to \$15,000. I have read prices even higher than that.

I would like you to refer to table II on page 4 which indicates that the prices of peregrine falcons average about \$2,000, which is roughly the same price as a large parrot.

Operation Falcon has definitely retarded or let's say, delayed, the adoption of the propagation regulations. The National Audubon Society has criticized the regulations, the falconers, and the propagators, for their failure to, let's say, fulfill their obligations under the exemption. We don't feel that is true.

Senator CHAFEE. Why don't you wind up your statement, Mr. Berry.

Mr. BERRY. I would like to show you copies of the seamless markers and the other marker, if I can. Can I hand these to you, sir?

I think this is really one of the keys to the problems that we have been confronted with. These are the old flexible nylon mark-

ers. These are the seamless markers which the Fish and Wildlife Service has characterized as tamper proof.

Now, Audubon in its statement before the House subcommittee has confused these two markers. In essence, they have said that the seamless marker has been used throughout Operation Falcon when in fact there was no possibility of its use because it postdated all of the indictments made under Operation Falcon.

Inasmuch as Audubon's basic premise is incorrect, we believe their conclusions are unjustified.

Senator CHAFEE. Fine. That is an introduction for Mr. Leape from the Audubon Society.

STATEMENT OF JAMES LEAPE, COUNSEL FOR WILDLIFE PROGRAMS, NATIONAL AUDUBON SOCIETY

Mr. LEAPE. Thank you, Mr. Chairman.

I am appearing on behalf of the Audubon Society and its half a million members nationwide. We are here to support a strong reauthorization of the Endangered Species Act. We are here to ask this committee to fix the one provision that is broken, and that is the provision which allows the sale of peregrine falcons.

It is the only endangered species that is now allowed to be sold in interstate and international commerce. We are convinced that Operation Falcon demonstrates that that sale provision is causing a serious threat to the preservation and protection of wild populations of peregrines in this country.

Let me first explain what the exemption does and does not do and what we are and are not asking for.

We are asking for an end to sale of peregrine falcons in interstate and international commerce. We are not asking for an end to the use of peregrines in falconry, nor are we asking for an end to private breeding operations. We are only asking that these birds be banned from interstate and international commerce because that is what is posing the threat to the wild populations.

Now there has been some confusion about what that raptor exemption does and when it went into effect. It accomplishes three things. One is it makes it legal for falconers to hold peregrines. Second is it does reduce the paperwork involved in holding peregrines because it exempts them from the permit requirement of the Endangered Species Act. The third is, it allows sales.

We have no problem with the first. As to the second, it is clear that those permit requirements are there for good reason, and the reason is, that we need to be very careful when we allow people to handle endangered species, and the permit requirements provide the mechanism for that care. Finally, sale.

The only thing that was not immediately effective in 1978 was the sale provision because that required special regulations under the Migratory Bird Treaty Act, which also protects these birds. It is that provision which became operative in 1983 through those regulations.

The results from the 1984 breeding season are not at all encouraging because they demonstrate breeding continues to be dominated by the peregrine fund, which does not in any way rely upon the sale of its birds.—Although Dr. Cade alluded to the help which the

peregrine fund has received from falconers over the years, we point out most of that help was received before the exemption took effect in 1978 and that none of it is related to sale.—During 1984, the peregrine fund released 254 peregrines to the wild, all captive birds. During the same period, those private breeders who are not now under indictment produced a total of 13 for release to the wild.

We do not mean to denigrate the contribution of private breeders to their sport, nor do we wish to denigrate their historical contribution to the recovery of this species. All we are saying is that sale does not contribute to that effort in any significant way. It is clear from Operation Falcon that sale poses a serious threat.

Briefly, evidence gathered in Operation Falcon and made public to date indicates that more than 60 peregrines were taken from the wild over the course of that investigation in the United States. The investigation continues so we do not yet know the full extent of illegal take that it will discover, nor do we, of course, know about any illegal take that it has not uncovered.

For a more complete picture of the impact of provisions allowing sale of captive bred raptors, we suggest that the committee take a look at what is happening in Canada, because sale of captive bred peregrines has been legal in Canada for longer than it has been legal here, and in particular the export of captive bred peregrines is allowed there under CITES. The authorized sale of captive-bred peregrines has caused serious problems with wild peregrine populations in Canada.

Two examples from recent indictments illustrate the problem. One large breeder in Ontario reported to Operation Falcon officials in his guilty plea that in a space of less than 1 year, he had conducted over three-quarters of a million dollars in business exporting falcons—peregrines and gyrs. During that year he reported taking at least 15 anatum peregrines from nests in the wild.

A second breeding operation in the Yukon Territory is reported in the Canadian indictments to have taken more than 20 peregrines from nests in the wild and has done over \$700,000 in business in the space of 2 years trading principally peregrines and gyrs.

Now the reason this is a problem and the reason it is linked to sale is that although it is, of course, illegal to sell these wild birds, they can be easily covered through captive breeding operations so long as the sale of captive bred birds is allowed.

Despite the seamless band, it is clear that most of these breeders who have been illegally selling birds taken from the wild are doing so by laundering them through breeding operations. In fact, the Canadian Government in its report of the most recent indictments testified that that was the typical modus operandi for these operators.

It is that weakness in the system, the impossibility of assuring that captive bred birds offered for sale were in fact captive bred, that has led to the problem. It is for that reason that we are asking for an end to the sale of these endangered birds. Thank you.

Senator CHAFEE. OK, Mr. Leape, you heard the testimony of the prior gentlemen. Mr. Berry indicated—or maybe it was Mr. Bond—that the regulations didn't even go into effect until nearly 1984, or certainly late 1983; therefore, how can all of these dire things be so

that you mentioned, when the regulations weren't even in place until then?

Mr. LEAPE. What we are saying is twofold. First of all, the exemption became effective when it was passed in November 1978. The only part that didn't go into effect was the sale provision. That is what became effective in 1983 when regulations made sale legal under the Migratory Bird Treaty Act.

As far as reducing paperwork requirements, as far as authorizing falconers to hold peregrines under the Endangered Species Act, those things happened in 1978. But it is just sales we are talking about that happened in 1983.

What we are saying in the United States, in the figures I cited from the United States, is that illegal take—that is, take of peregrines from the wild—is a serious problem and that the regulations allowing sales make it almost impossible to stop that problem because it is impossible to prove that a bird wearing a seamless band was in fact taken from the wild, and thus it is all too easy to take the bird as an egg from the nest, slip on a seamless band, and have a foolproof defense to law enforcement prosecution.

Senator CHAFEE. Mr. Berry indicated you had a very narrow range to operate in.

Mr. LEAPE. That is right. It is 2 weeks after hatching, I believe—10 days to 2 weeks, depending who you ask.

The problem is that the easiest way to get these birds is to take them as eggs from the wild or as chicks from the wild. That is how most of these people indicted in Canada and in the United States have been operating.

If you take it as an egg, you are there when it hatches. You can slip on the band in the first 2 weeks.

Senator CHAFEE. Mr. Bond, what do you say to that? After all, there was this Operation Falcon and a lot of people were caught redhanded, as it were. What do you say to that?

Mr. BOND. I guess that is correct, Mr. Chairman; there were. I don't know where Mr. Leape gets his figures, but a review of all the indictments only implicates 8 peregrines, not 60; 8 peregrines from the rule 11 statements, with which you might be familiar.

Senator CHAFEE. Let's settle that. What do you say to that, Mr. Leape?

Mr. LEAPE. We are relying, not only on the indictments filed to date, but all the information contained in the affidavits filed in support of search warrants and indictments in this case.

Senator MITCHELL. He said the rule 11 statement. That is guilty pleas.

Mr. LEAPE. That is correct.

Senator MITCHELL. That is quite different from an indictment.

Mr. BOND. That is correct, Mr. Chairman. My point is if there is an implication of others and cases have not been brought and it is almost 10 months later, we are wondering what has happened.

Senator CHAFEE. Are you suggesting that there wasn't much to these indictments?

Mr. BOND. Yes, Mr. Chairman. We don't deny it. We don't condone any illegal activity, either by our members or others. But the point is in your reference to Mr. Leape about the July 1983 regulations, the cornerstone of those regulations is the seamless marker.

That was not available until the fall of 1983. So effectively it was only used in 1984.

Furthermore, the biological parameters Mr. Berry spoke of are so restrictive that in fact captive populations of birds tend to breed a few weeks earlier than the wild populations, so there is almost no overlap without going thousands of miles.

Senator CHAFEE. What about this trade in Canada that he talks about and the taking in the Yukon and those areas. Canada apparently having a long tradition of permitting the sale.

Mr. BOND. I don't know how long the tradition is, Mr. Chairman, but two factors. They don't have a seamless marker of any sort that they mark their birds with; and furthermore, they don't have a uniform national system of procedures or standards as imposed by our regulations. They are guided by province-to-province regulations where they exist and sometimes the record is silent on regulations but the activity is allowed. So in no way can we compare that to the United States.

Further, Mr. Chairman, during the Operation Falcon, the Fish and Wildlife Service sting operative or the Service itself was unable to purchase a single bird in the United States in the operation.

Senator CHAFEE. Mr. Leape.

Mr. LEAPE. Two points. First, the reports of the Canadian indictments testify that the primary modus operandi for these kinds of operations is to take the birds as eggs or chicks, put them in the private breeding operation, and represent them as captive bred.

Now, it is true they don't use a seamless band in Canada. It is not clear why that makes a difference because if you take the peregrine as an egg, you are going to have it when it is time to slip on the band. What they do in Canada, according to these documents, is have a Canadian wildlife official come out and band the bird itself. It is not clear why that system is weaker.

The second thing I would like to say is that NAFA has repeatedly asserted that the Fish and Wildlife Service was not able to buy birds in this country, but there are at least two major traffickers who have already been indicted who were selling birds in this country. That is Mr. DeCarnelle who has pled guilty already to illegally importing 30 Finnish goshawks and Mr. Luckman who sold both peregrines and gyrs to people in this country and Canada.

There are two American falconers, including the largest private peregrine breeder in the United States, who are now under indictment in Canada for selling gyrfalcons and gyr hybrids to people in Canada for a total of \$270,000.

So there is a sale going on already in the United States, and, as we have explained, the problem will get worse.

Senator CHAFEE. Thank you. Senator Mitchell.

Senator MITCHELL. Mr. Cade, do you support the continued sale of captive bred falcons?

Mr. CADE. Yes, with reservations I do. I am not known to be, how shall I put it, overly enthusiastic about commercialism simply because I don't like the thought of some big commercial operation that makes multithousands or possibly multimillions of dollars out of these birds. But I do, on the other hand, recognize the legitimate claim of the private breeder to some recompense for his time and

his expenses in producing these birds. I think there should be some mechanism available for him to recoup his costs. I believe that the current regulations provide that mechanism and at the same time safeguard my concerns about the development of really big commercial operations because of this closed-loop system that Mr. Bond has already explained to the committee.

If I could, I would like to make one other comment about the discussion that has been going on here. That has to do with the so-called threat to wild populations.

It keeps being claimed, or at least inferred, that peregrine falcons in the wild are declining or being greatly reduced in numbers because of illegal activities, the taking of them from the wild. The taking of peregrine falcons from the wild is esthetically ugly and socially unacceptable. It is ugly and we don't like to see it happen. The place to catch thieves is out on the cliffs where they are poaching. The agents need to learn how to do that.

The point I want to make is from a biological point of view, it doesn't make any difference. We have more peregrine falcons in the wild, breeding in the wild right now in North America and in Europe than we have had in the past 30 years. There are a thousand pairs nesting in Britain right now. That is more than they have had in the entire century. They have about 50 to 75 nests robbed every year in Britain. Still the peregrine is on the increase there.

If you are going to talk about a biological impact on all of this, that is baloney. It is esthetically ugly and socially unacceptable. It should be stopped to the extent we can do it. That is all we can do.

Senator MITCHELL. I will give you a chance to comment, but before I do, let me ask another question because we have a dispute here. Let me just ask you all to respond briefly each in turn, beginning with Mr. Cade.

Can or cannot peregrines taken from the wild as eggs or chicks be easily banded as captive bred?

Mr. CADE. They can be more easily banded with the band that did exist than they can be with this closed, seamless band. but yes, it would be possible to cheat.

What I was trying to say before, you can't stop all cheating. I mean laws just don't do that. If somebody wants to break the law, he can find a way to break it. We ought to design our laws and regulations so they benefit the majority of honest folks, not try to catch the last culprit who is out there somewhere.

Mr. BOND. Mr. Chairman, I would concede yes, that under very narrow circumstances, if somebody breeding birds in the Northern United States, whose birds were in the cycle of activities, with the wild birds in the Southern United States, traveled from the North to the South, picked up a young bird or an egg, and got it back up there, he might be able to fit in that narrow timeframe to be able to put on a seamless marker. But Operation Falcon didn't demonstrate that was being done.

Senator MITCHELL. Mr. Berry, I think I know your answer.

Mr. BERRY. I would like to address another issue here.

Senator MITCHELL. Answer this one first.

Mr. BERRY. OK. It is conceivably possible, and the other issue is related, to launder a bird into a bogus breeding project, but highly unlikely and extremely costly.

Senator MITCHELL. So, my question was can it be easily done, and your answer is no.

Mr. BERRY. No. Very, very difficult.

However, we are developing absolute criteria that will identify, absolutely, any laundering or bandswitching problems that might arise. In other words, if somebody switches bands and the Fish and Wildlife suspects somebody, we are developing absolute criteria in the form of a footprint which is a photograph of the dorsal scale pattern of a bird's foot to identify that fraud. This would only be used for sensitive species. If a photograph accompanied the band, in other words a picture was taken of the bird's foot with the band number and the scale pattern, which does not change, ever, just like your fingerprinting, that band should remain with that bird indelibly, forever. So if the bird dies, you cut off the foot and take the band and put it on another bird and if somebody—the Fish and Wildlife Service—at a later date compared that fingerprint, with the prior fingerprint, it would disclose the fraud.

The other absolute criteria against bringing birds into captivity and laundering them through a project is a simple blood test to confirm paternity. It is now effective in about 30 percent of the cases with a 99 percent confidence level.

I am told by the people at the University of Texas, who are doing this research, that within 1 to 3 years, it will be absolute for 100 percent of the peregrine falcons within a 99-percent confidence level.

Senator MITCHELL. Let me get just a brief comment, Mr. Leape. Would you answer the question I asked?

Mr. LEAPE. Yes; 16 breeders have been indicted for laundering birds. I think that testifies to how easy it is.

Senator MITCHELL. Have any of them been convicted?

Mr. LEAPE. I think 12 or 13, the figure is in my testimony, 12 or 13 have been convicted and a couple await trial. Not all of those are peregrine breeders. But I am saying this happens, that there are a lot of people out there in a position to launder birds. It is possible if the Fish and Wildlife Service could sit on every breeding operation and watch the eggs laid and watch them until they hatch, we could prevent that problem. But it isn't possible with any reasonable level of resources.

As long as that is the case, that continues to be a problem because they are taking the bird as eggs and chicks. That makes it very simple to slip on the seamless band.

Senator MITCHELL. Thank you, Mr. Leape. Thank you, gentlemen. Thank you, Mr. Chairman.

Senator CHAFEE. Thank you.

Senator Symms.

Senator SYMMS. Thank you, Mr. Chairman.

I welcome the members of the panel, and Mr. Cade, we are very happy to have your operation right near Boise, ID. I guess the question I would like to ask is I hear a lot of people tell me there are a lot more peregrines around in Idaho. They see them in differ-

ent places now. I think it is largely related to the results of your installation. Isn't that correct?

Mr. CADE. We hope so. Our project was actually working in Idaho a few years before we were located there.

Senator SYMMS. Morley Nelson.

Mr. CADE. That is correct.

Senator SYMMS. I guess the question is with respect to the commercial activity, your operation where you are growing and releasing birds as a nonprofit operation.

Mr. CADE. That is correct.

Senator SYMMS. But if someone got in the commercial business, is it to be assumed that they would make more or less falcons?

Mr. CADE. Make more or less falcons?

Senator SYMMS. I would think if somebody was in the business to produce falcons in the market, you might produce more of them.

Mr. CADE. That depends on how many birds it takes to saturate the market.

One of the aspects of commercialism that was mentioned but perhaps got glossed over is that these birds that are being produced for sale are not being bought just by private individuals, not just by falconers, for example, but they are being purchased by State conservation agencies that are interested in having their own local peregrine recovery program. This has been true of all of the birds that have been released so far in the State of Minnesota. They have all been purchased from private breeders, and that will be the case in the program that is to begin this year in Missouri and one that is planned in Illinois. We see this as probably a mode of operation that will become more popular with States in the future.

Senator SYMMS. That is operating under current law?

Mr. CADE. That is correct.

Senator SYMMS. So you think current law is appropriate with respect to this then?

Mr. CADE. I would like to see it given a few more years to prove what it can do, yes.

Senator SYMMS. Thank you very much. Nice to hear from you this morning.

Thank you, Mr. Chairman.

Senator CHAFEE. One final question, gentlemen. Just a quick answer to this, each of you. What if we forbade the sale for export and if you want to say exempt Canada from that, OK. Mr. Cade?

Mr. CADE. This was argued from the very beginning, Mr. Chairman, and I am not really sure just what the comment in the regulations is about that. It is rather difficult at the current moment I know to engage in overseas sales, but I think you can do it through export permits in addition to the raptor propagation permit under the MBTA.

It is true also that the higher prices for these birds one in the overseas market, particularly in countries like West Germany and in the Middle East. I don't know what that would do in terms of cutting down illegal activities, if that is the question. It might have some slight impact on it.

Senator CHAFEE. Mr. Bond.

Mr. BOND. Thank you, Mr. Chairman. I am just going to preface with one sentence. Until recently the United States was one of the

few nations in the world that didn't allow a commercial sale of these raptors. Given that, I am not sure what benefits there would be gained by prohibiting an international market. So therefore, I don't see any real justification for prohibiting that.

Senator CHAFEE. The reason I ask it is because somebody made the point that these sales aren't always to individuals. I think Mr. Cade made that point. They are sometimes to States for rebreeding and so forth.

All right, Mr. Berry.

Mr. BERRY. The approach of our association is that the production of captive-bred birds is a conservation measure. In other words, it is a substitute for wild birds. I think if it is a conservation measure in the United States, it is a conservation measure in other countries. Again, the replacement of captive-bred birds for birds taken out of the wild.

Senator Chafee. Mr. Leape? Of course, I know your answer.

Mr. LEAPE. It is half a loaf, Mr. Chairman. International sales certainly offer the most glamorous profits and are the biggest source of the problem in Canada. Most of the people indicted here, of course, were indicted for interstate sales.

Senator CHAFEE. Fine. Thank you very much, gentlemen. I appreciate you all coming.

The next panel is Mr. Steele, Miss Armstrong, and Miss Fulton.

All right, Mr. Steele, why don't you proceed. Again, there will be a time limitation.

STATEMENT OF BRUCE STEELE, SAVE OUR SHELLFISH, SAN LUIS OBISPO, CA

Mr. STEELE. I would like to thank you for letting the fishermen have a representation here.

I am representing the California Abalone Association, California Gillnetters Association, sport groups interested in the conservation of shellfish, Save Our Shellfish, and the California Sea Urchin Divers Association, of which I am on the board of directors.

I would like to note we export \$10 million a year worth of sea urchins to Japan.

The cherry trees have recently bloomed here in Washington. Everyone in this room knows this is a sign spring has arrived. You have seen it before, and the association seems obvious.

The various kelp and plant communities in the temperate seas also reproduce and experience growth in spring. But unless one has observed this from beneath the surface, it isn't obvious that any change has occurred.

The same holds true for sea otters. When sea otters recolonize a new area, the surface of the ocean looks the same, yet on the bottom much has changed. We fishermen and divers who spend years at sea notice changes that aren't apparent to the casual observer.

In the early sixties, sea otters were eating the shellfish around Morro Bay. We fishermen tried to get the State government to address the problem, but nobody wanted to admit troubles with the otters' heroic comeback. The abalone stocks collapsed.

A decade later, otters had expanded to Pismo Beach, home of the Pismo clam. Within 2 years, a sport clam fishery supporting over 80,000, clammers a year had collapsed.

Senator CHAFEE. 80,000?

Mr. STEELE. 80,000 people a year were utilizing the beaches at Pismo Beach.

Senator CHAFEE. I think you used the word supported 80,000; 80,000 made their living off clamming?

Mr. STEELE. The clams supported a recreational use of 80,000 people.

Senator CHAFEE. It was a source of clams for 80,000 clamsmen.

Mr. STEELE. Yes. This was a sport industry. Clam reserves off limits to clammers suffered the same declines. Recently most of the nearshore net fisheries have been added to the list of ex-fisheries on the central coast of California. Fisheries producing millions of pounds of seafood yearly have been totally eliminated.

Now the U.S. Fish and Wildlife Service would like to translocate 150 to 250 otters to San Nicolas Island, one of the more pristine shellfish areas on the west coast. Admittedly, sea otters need management, but must we risk all nearshore fisheries in southern California in the name of research, as some would have it?

I have heard time and again that translocated sea otters could be legally managed. Yet, in the final rulemaking for experimental populations, this is only true if that population is not located within a unit of the National Parks System. Most of the islands where otters might relocate, were they to leave San Nicolas Island, are within a national park. Does the Park Service intend to remove these wandering animals?

There are only two sites within the southern range of sea otters which can hold large numbers of otters without severely damaging our present fisheries: The northern coast of Washington and San Francisco Bay. Since the experts agree that removal is the only effective means of long-term containment, either of these sites would be a good area to relocate otters which venture into the oil-developed areas of southern California. The small carrying capacity of San Nicolas Island, 300 to 400, is not adequate for management demands.

There is reason to question the otters' threatened status in the first place. They were listed due to a perceived oil risk. Using oil spill models developed in the last few years, it seems the risk of a catastrophic spill is rather remote. There have never been any otters killed by an oil spill in California, so why must we fishermen pay such a heavy price for these perceived oil risks?

With any translocation we need containment of the parent population. In any translocation, sea otters need room to expand their population while still minimizing resource conflicts. Somehow the Endangered Species Act should be amended to take precedence over the inflexibility of the Marine Mammal Protection Act in order to proceed with management.

These animals have eliminated 90 percent of the invertebrate life within their range. They have cost millions in taxpayers' money. Let's try to resolve these problems.

Ladies and gentlemen, the ocean is the last frontier. We who spend our lives there, we who dream about farming the ocean's

great potential and have spent years in pursuit of that goal, as you to listen. There is a problem with allowing marine mammals to expand with little or no concern about where the food to feed them will come from. You are encouraging growth at the top end of the food chain without considering the effects on the ecosystem. You are looking at the surface and not beneath it.

Senator CHAFEE. Is that it?

Mr. STEELE. That is it.

Senator CHAFEE. Right on 5 minutes exactly. Well done, Mr. Steele.

Senator CHAFEE. Miss Armstrong.

**STATEMENT OF KIT ARMSTRONG, WESTERN OIL & GAS
ASSOCIATION, VENTURA, CA**

Ms. ARMSTRONG. Mr. Chairman, thank you very much for the opportunity to be here today. My name is Kit Armstrong. I work with Chevron USA. I am here today representing the Western Oil & Gas Association, which I will refer to as WOGA.

WOGA has submitted a written statement for the record. I will highlight that statement and hopefully do justice to the full details that are in that statement.

WOGA has a number of member companies who are very active in the exploration, and development of the important offshore oil and gas resources in California. They are very concerned about the impact that the sea otter has had on their activities and about what the future of their activities will be in light of continued concerns about the sea otter.

I could testify about the restrictions that have been imposed on oil leasing, exploration and development activities in the offshore California waters because of concerns about the sea otter. I will spare you that recitation since the written statement does provide examples of those problems.

Let me simply say now that those restrictions do continue to be imposed. We continue to face future prohibitions and constraints on our projects because of the status of the sea otter. The sea otter issue, therefore, continues to be of major concern to our industry.

For a number of reasons that are too lengthy to go into here, the sea otter controversy has been intense and longstanding, involving a variety of different interest groups with varying interests and concerns.

WOGA is fully committed to working through a consensus process with these groups to try to find acceptable resolutions to the issue.

For the reasons we have mentioned in our written statement, we believe that significant progress has been made in recent months to identify possible solutions to critical aspects of the sea otter issue. We fully commend the efforts that the U.S. Fish and Wildlife Service and all of the interested parties have made to accomplish that progress.

However, we firmly believe that the final, long-term resolution that all the interest groups seek will not be possible without some amendment to the Endangered Species Act. Let me indicate why.

A critical component in the U.S. Fish and Wildlife Service's program to recover the sea otter is to translocate a portion of the existing sea otter population from the central coast of California to San Nicolas Island at the edge of the Santa Barbara Channel and not far distant from an area of some of the most intense existing and proposed oil and gas development in California.

If the translocation is to be a measure that solves problems rather than one that greatly expands the area of potential conflict over the sea otter and potentially imposes significant new regulatory burdens on our industry, WOGA strongly believes that limited, well-focused amendments to the Endangered Species Act, and specifically to section 10(j) of the act dealing with experimental populations, are both desirable and necessary.

The written statement discusses in detail our specific recommended amendments and our reasons for them, so I won't go into them at this time. I would like to try to summarize them in a very simple way.

First, we believe that our suggested amendments to section 10(j) will be necessary to assure that the U.S. Fish and Wildlife Service has the authority it needs to fully mitigate the potentially serious adverse effects of this translocation, such as by being able to contain sea otters at the translocation site over the short and the long term, to avoid the need to apply the full range of section 7 and section 9 of the act to translocated populations, and to tie any translocation into a comprehensive plan to resolve broader issues relating to the conservation and recovery of the entire sea otter population.

Second, to assure that the Fish and Wildlife Service has the authority it needs to enter into agreements with our industry and others regarding what additional measures, if any, will need to be implemented to protect the sea otter so that oil development projects and other activities that could affect sea otters may proceed.

As our written statement explains, we do not believe that the Fish and Wildlife Service now has adequate authority to do what we feel will be necessary to address both the needs of the otter and the needs of the interested parties. WOGA believes that considerable progress has been made over the last year to identify approaches to resolving the longstanding sea otter controversy. Nevertheless, it is evident to us that, without additional legislative clarification of the Service's authority to address the concerns I have just mentioned, it is very unlikely that the Service will be successful in its efforts to resolve this longstanding conflict.

WOGA and its member companies firmly believe that offshore oil and gas development in California can be fully compatible with protection of the sea otter. We want very much to see the conflict resolved in ways that best meet concerns for protection of the otter as well as those of affected agencies and interested groups. We therefore sincerely hope the subcommittee will be willing to consider the limited amendments to the Endangered Species Act we have recommended. We believe the suggested amendments are fully consistent with the legislative history of the 1982 amendments that establish section 10(j). More important, we believe the amendments are critical to achieving the much-needed resolution of the sea otter conflict.

Thank you very much for the opportunity to present our statement. I will be glad to answer any questions.

Senator CHAFEE. Thank you very much, Miss Armstrong.

**STATEMENT OF CAROL FULTON, FRIENDS OF THE SEA OTTER,
CARMEL, CA**

Senator CHAFEE. Miss Fulton.

Ms. FULTON. Friends of the Sea Otter appreciates the opportunity to testify here today on behalf of 4,700 members nationwide who are keenly concerned with the protection of the California sea otter and its marine habitat.

We strongly support reauthorization of the Endangered Species Act, with increased funding to ensure that necessary listings are not delayed and that once listed, species receive the truly meaningful protection and aggressive recovery efforts they deserve.

The southern sea otter is now known to be in far greater jeopardy than was recognized at the time of its initial listing back in 1977.

In this past year we have gained an even better understanding of our inability to protect sea otters from oilspills. We have also seen the Secretary of the Interior award leases for offshore oil exploration deep within the southern portion of the sea otter range, as far north as Morro Bay. And just in the past month Secretary Hodel has said that his new offshore oil leasing plan would target three oil and gas leases along the sea otter range and the Big Sur coast within the next 5-year timeframe.

However, before focusing on the existing and ever-increasing oil-spill threat to the otters, we would like to note one area of apparent progress. That is the January 21, 1985, decision of the California Department of Fish and Game to enact an emergency ban on all large mesh entangling fishing nets within the nearshore shallow waters, 90 feet and less in depth, throughout the sea otter range. These restrictions were in response to the—

Senator CHAFEE. Why don't you skip that, because we have that before us. I am interested in where we go from here.

Ms. FULTON. All right. The point there is we didn't even know at the time the otters were listed that we were losing that many animals. At that time of the listing, it was the small range of the population, and the small number, estimated at that time to be 1,800 to 2,000 animals—with a projected increase of 5 percent a year in combination with the threat of a tanker spill that put the otters on the threatened list. Today we know we only have about 1,400 animals.

Thus the most optimistic comment we can make at this point is we are back to square one in the recovery effort for the sea otter.

If we are going to make any meaningful steps toward recovery, we can only begin right now.

We have seen in the last year two alarming incidents that have underscored the threat, the daily threat, of an oilspill to the otter range.

Almost 1 year ago to the day, April 19, 1984, a Navy contract tanker lost power 12 miles offshore the Big Sur coast, and drifted to within 1½ miles of shore before they could get an anchor down.

That tanker was carrying a volume of oil greater than all the oil lost in the Santa Barbara blowout of 1969. Had she broken up, it would have been the single greatest catastrophe to the otter population since its near extinction during the fur trade.

Just this last October we had a tanker explosion and sinking off San Francisco. We learned then we do not have the technology to contain oilspills in an open ocean spill situation. Oil went 140 miles from the spill site, despite state-of-the-art technology. The projected trajectory was off 180 degrees. That spill moved 20 miles overnight. The Coast Guard was amazed. No one expected anything like that. If it had gone as far south as it went north, it would have entered the northern half of the otter range.

Clearly, if we are going to have any protection for the otter range that is meaningful—

Senator CHAFEE. We have the most unusual 5-minute hourglass. It just stops now and then. It is in favor of your testimony, obviously.

Ms. FULTON. What we need to do is get tanker lanes established to keep these big ships further offshore so if they have an accident, there is time to respond. We have asked the Fish and Wildlife Service to initiate formal section 7 consultations with the Coast Guard to try to effect this.

Also, these near misses illustrate the main reason we are all here today: The urgent need to get on with the establishment of at least one additional breeding colony of sea otters so if we have a major oil catastrophe, it is unlikely to hit both the established parent population and the colony.

We continue to favor San Nicolas Island. Initial progress has been encouraging, but it now looks virtually impossible they will meet the target date of September or October of this year. We are still at least another year and a half away from translocation.

We want to note our substantive disagreements with the draft rule prepared by the Service. We think clearly there has to be more emphasis on research, a stronger commitment to containment at the site, and, above all, that the colony should be determined to be essential.

The Service has recognized that the population hasn't grown for over a decade and may have declined and we now only have about 70 to 77 percent of the number of animals we thought we had. The oil threat continues and increases. We don't understand how the Service can conclude that the population could not sustain the continuing losses in fishing nets and yet say they could lose the same number of animals for translocation.

The only reason removal of those animals is acceptable is because they will still be alive and they can be used to replenish the parent population in case of an accident.

We further support translocation in conjunction with the U.S. Marine Mammal Commission's letter of December 2, 1980, which calls for restoring otters to additional sites which are secure from threats. We fail to see how denying a translocated colony the protections of section 7 consultation would meet that goal.

We would like to acknowledge the legitimate concern of the other people at the table here that if the otters were to disperse from the site, it could restrict economic interests. However, we be-

lieve that the concession we have made to contain the translocated animals at San Nicolas Island, when historically they occupied the entire southern California coast, is a major concession. To further deny these animals the necessary protections would be unacceptable.

Senator CHAFFEE. Fine. Thank you.

What about the suggestion of Mr. Steele that you put them up further north, in San Francisco or in Washington?

Ms. FULTON. San Francisco Bay at the moment would probably be one of the most inappropriate sites I can think of. There are refineries. There are tankers in and out of the bay all the time. The two major spills we have had here in California within the past 15 years were tanker spills, both right off San Francisco. Sewage overflows into the bay every year. It is not a great place for sea otters.

As for Washington, I fail to see how the California sea otter population is enhanced by taking these animals and moving them as far away as possible. We feel the first site should be in the very best location for the otters, similar to their current range. We think once you are able to establish a breeding colony, if the population responds, you will have more management options available.

Senator CHAFFEE. Suppose you did nothing. It seems to me Miss Armstrong was saying just leave them where they are, don't have a translocation, and with the advent of the change in the netting rules by the California legislature and so forth, the otter will come back. Your fear is that one tanker explosion or leak of a massive size could just wipe them all out? Is that your principal concern?

Ms. FULTON. That is the main concern, the oil threat, we don't think the animals can naturally expand their number or range fast enough to offset the oil threat.

Senator CHAFFEE. What do you say, Mr. Steele, about translocation to the island? You are opposed to it, but is that the area that you were talking about in your testimony where so many people were getting the clams?

Mr. STEELE. No.

Senator CHAFFEE. Were you addressing that particular place?

Mr. STEELE. The place where they were getting clams has otters, and basically the fishermen would like to see those sorts of areas maybe restored. But the island where they are planning on moving them does have large shellfish reserves.

Senator CHAFFEE. San Nicolas Island?

Mr. STEELE. Yes. It has a lot of lobster and abalone.

The reason we would like to see them moved north to Washington is because there are a lot less resource conflicts there. There aren't developed fisheries. There is a lot more room up there for otters to expand. They can only have about 300 otters at San Nicolas Island. Once the range in southern California gets to a certain size, they will need a relief valve to put spare animals, if indeed we are going to manage these animals.

Senator CHAFFEE. Senator Symms.

Senator SYMMS. Thank you, Mr. Chairman.

I want to ask Miss Armstrong, in the experience your company has had in offshore drilling, is there any conflict with offshore drilling and the sea otter population?

Ms. ARMSTRONG. There hasn't been any actual conflict in terms of having spills affecting otters because there haven't been any spills that have affected otters.

Senator SYMMS. There actually are less spills statistically on offshore drilling than there is tankers; isn't that correct?

Ms. ARMSTRONG. That is correct. There is a very favorable record statistically on offshore oil and gas activities, both exploration and producing.

Senator SYMMS. Do these otters come and live around these drilling rigs?

Ms. ARMSTRONG. Not yet, no. The otter population presently inhabits a stretch of the California coastline, what we call the central coast, ranging from Santa Cruz to an area around San Luis Obispo. Historically the oil and gas offshore activities have been south and east of that area.

As a result of lease sales in recent years, tracts have been leased in an area called the Santa Maria Basin, which is south of, and some tracts that have been leased opposite, the southern end of the sea otter range. Proposals for development of the tracts south of the sea otter range not opposite at this point—are starting to be initiated. Those projects then will invoke section 7 consultations under the Endangered Species Act and the possibility of constraints or prohibitions on those projects.

The State government also has the opportunity through the coastal commission to impose restrictions on both exploration and production operations if they may affect sea otters.

Senator CHAFEE. Senator, one interruption, if I might.

Unfortunately, I will have to go. I appreciate you folks coming this long distance from California. You have given some good testimony. We will look over your statements in more detail.

As I get it, Miss Fulton, you don't want any change in the law?

Ms. FULTON. We would be willing to agree to an amendment, and we are still in negotiations, but at this point we would be willing to support a technical amendment that would make the Marine Mammal Protection Act consistent with the Endangered Species Act to ensure the animals can be contained. We think this is fair reassurance to give to the State and other industries. So within the 10(j) provision, we are willing to see a technical amendment so the animals can be contained at San Nicolas Island.

Senator CHAFEE. Thank you.

Go ahead, Senator Symms.

Senator SYMMS [presiding]. My question is on this provision. This sea otter question, we don't have a lot of these on the Snake River yet. But just to get it so I understand the resource conflict.

There isn't really a resource conflict between offshore drilling and sea otters, but the conflict is between fishing nets or threatened oil spills and the sea otter. Is that correct, Miss Fulton?

Ms. FULTON. Otters are primarily found within a mile or two of shore along most of the areas within their range. The rigs are further offshore. The concern is with a blowout, with an oil spill.

Senator SYMMS. But the risk is really from a tanker breakup rather than a blowout.

Ms. FULTON. We think there is a greater risk of a spill from a tanker than a rig blowout. But we also remember the Ixtoc spill in

the Gulf of Mexico and all the U.S. technology we had could not keep it from hitting the Texas beaches.

Senator SYMMS. Was that a tanker?

Ms. FULTON. That was an oil rig blowout.

Also, Senator, there are other concerns, too, for example drilling mud discharges into the water and destruction of kelp beds from boat traffic out to the rigs. But primarily it is the threat of an oil spill.

Senator SYMMS. But the primary resource conflict, just so I can get it straight, is between the fish nets catching the sea otters accidentally and the threat of oil spills that you are concerned with?

Ms. FULTON. Yes.

Senator SYMMS. Mr. Steele, you are concerned about the transported otters affecting the shellfish population; is that correct?

Mr. STEELE. Yes; they reduce shellfish populations by 90 percent, as I said. The State legislature has closed gillnetting within the range of sea otters already.

Senator SYMMS. Miss Armstrong, what you are saying is that you think it can be resolved as far as the operation of offshore drilling and sea otter populations. You think that is a doable thing.

Ms. ARMSTRONG. We believe it is possible. We also believe to do that will require some amendment to the act.

Senator SYMMS. Amendments to the act to make it more flexible so that there can be an accommodation between those two interests.

Ms. ARMSTRONG. That is correct.

Senator SYMMS. Do you have those recommended amendments?

Ms. ARMSTRONG. Yes; they are contained in our written statement.

Senator SYMMS. I thank you all very much. I appreciate you all coming. It just happened I was in California last week. I had an opportunity to visit your refinery in Richmond.

Ms. ARMSTRONG. I hope it was working right.

Senator SYMMS. There wasn't any oil spill in the area, I am happy to report. I didn't see any seals or otters, either.

Thank you very much. The meeting is adjourned.

[Whereupon, at 12:25 p.m., the subcommittee was recessed, to reconvene subject to the call of the Chair.]

[Statements submitted for the record follow:]

STATEMENT OF ROBERT A. JANTZEN, DIRECTOR, U.S. FISH AND WILDLIFE SERVICE,
DEPARTMENT OF THE INTERIOR, BEFORE THE SUBCOMMITTEE ON ENVIRONMENTAL
POLLUTION, COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS, U.S. SENATE,
CONCERNING S. 725 AND THE REAUTHORIZATION OF THE ENDANGERED SPECIES ACT

APRIL 18, 1985

Mr. Chairman, I appreciate the opportunity to appear here today to discuss reauthorization of the Endangered Species Act of 1973, as amended.

As you know, the Act is probably the most far-reaching law ever enacted by any country to prevent the extinction of imperiled animals and plants. Conserving these biological resources is a complex job involving not only the Federal Government, but the States, the scientific community, conservation organizations, industry, and concerned individuals as well. Since 1973, the Congress has enacted a number of amendments designed to make the Act more effective and, at the same time, to increase its flexibility for responding to potential problems. These changes, along with internal administrative improvements in the Federal departments responsible for implementing the Act, have resulted in a program that is running efficiently and cooperatively.

The Department of the Interior is requesting a 4-year reauthorization of the Endangered Species Act, without substantive amendments. We recommend that S. 725 be amended to authorize, during fiscal year 1986, \$23 million to the Department of the Interior for administration of the Act under section 15(a)(1) and \$4 million for grants to States under section 15(b). These amounts, approximately equal to the appropriations by Congress for

FY 1985, are consistent with the President's FY 1986 budget request and would provide for the continuation of our endangered species activities at current levels. We also recommend that such sums as may be necessary be authorized in the subsequent three fiscal years. Specific funding requests for FY 1987-1989 will be prepared during the normal budget formulation process.

A review of our efforts over the past several years may have a bearing on the Committee's consideration of the reauthorization of this Act.

Listing Accomplishments

The process by which animals and plants are listed for protection, as outlined in section 4 of the Act, was expedited by the Congress in 1982, and revised regulations implementing those changes are now in place. As a result, the listing rate has steadily increased. During 1984, for example, a total of 46 more native and foreign animals and plants were placed on the U.S. List of Endangered and Threatened Species. Another eight have been added since the beginning of 1985, and we expect a high total for this year due to the large number of listing proposals now under consideration. As of today, 831 animals and plants in the U.S. and foreign countries are listed as endangered or threatened.

Future listing actions will be facilitated by our ongoing candidate assessment program. Since 1982, the Fish and Wildlife Service has published periodic notices on vertebrate wildlife, invertebrate wildlife, and plants

for which there is reason for concern. As new data become available, the notices are reevaluated and updated. Species on these notices, along with those species for which the Fish and Wildlife Service has accepted listing petitions, are considered candidates for future listing protection under the Endangered Species Act. Although the Act does not authorize legal protection for candidate species, Federal agencies have found the notices helpful for planning to avoid potential problems. The Bureau of Land Management, for example, uses the candidate species list to identify species needing special management and gives those species special consideration in making resource management decisions. In addition, the Act provides for expedited listing when any emergency poses a significant risk to a species.

Recovery Accomplishments

Restoring endangered and threatened species to the point that they are again secure members of their ecosystems, and thereby no longer in need of special Federal protection, is a most critical element of the endangered species program. Listing a species is of limited value if steps are not taken toward recovery. Our increased emphasis on recovery is reflected in the more than 50 recovery plans that were approved during 1984, about one-third of the plans that have been approved since passage of the Act.

The past year has provided encouraging news about a number of species. Just recently, for example, the Fish and Wildlife Service was able to remove the brown pelican in most of the southeastern United States from the list

of endangered and threatened species. This population has reached or exceeded historical numbers, recovering from the devastating effects of the pesticide DDT, which almost extirpated the pelican over much of its range in the 1960s. Other birds that were imperiled by DDT, particularly the bald eagle and peregrine falcon, are responding to the ban on this chemical more slowly than the brown pelican, but intensive recovery activities for these species are showing promising results.

Among the species that were secure enough to be reclassified from endangered to threatened during the past year are the Arctic peregrine falcon and the Utah prairie dog. Although they are still in need of some protection, the category of threatened allows for greater management flexibility. An animal that we believe may be ready for a change in status under the Act is the Florida population of the American alligator, and we have proposed to put it into a category similar to that covering the alligator populations in Louisiana and Texas.

The complex, usually difficult task of recovering endangered species is one that is too large for any single agency. A coordinated recovery program involving Federal, State, and local interests is usually necessary. Such an approach was initiated in 1983 when the Interagency Grizzly Bear Committee (IGBC) was established. The IGBC is composed of top-level managers from the Fish and Wildlife Service, the National Park Service, the Forest Service, the Bureau of Land Management, and the States of Wyoming, Montana, Idaho, and Washington. It coordinates research, management, law enforcement, and funding for conservation of the threatened

grizzly bear in the conterminous 48 States. Recovering this large carnivore in the face of continuing threats cannot be accomplished quickly or easily, but we are hopeful that the IGBC program will at least make the recovery goal possible. In the meantime, close interagency cooperation is being emphasized in a variety of other recovery programs.

The "experimental population" approach, authorized by the 1982 amendments as a tool for recovery of listed species, is beginning to show results. General regulations implementing the concept were published on August 27, 1984. Special regulations to establish the first experimental population of an endangered species were approved September 13, 1984. Within days, seven Delmarva fox squirrels were captured near Blackwater National Wildlife Refuge in Maryland and released into the Assawoman Wildlife Area, land managed by the State of Delaware. The Fish and Wildlife Service, working in close cooperation with Delaware and Maryland wildlife officials, plans several more such releases to augment the small experimental population. We have high hopes that this joint venture will hasten the day when the Delmarva fox squirrel is recovered and can safely be delisted. Plans for establishing experimental populations of other species are now under consideration by the appropriate State and Federal agencies.

Before leaving this discussion of our recovery efforts, let me turn to our progress toward recovery of the southern sea otter, located in California, an issue that will be the subject of a panel discussion later in this hearing. The southern sea otter was listed as threatened in 1977. At the present time, the population stands at approximately 1,400-1,500

animals, and has not grown in recent years. Since its listing, a recovery plan has been developed and approved, and in 1984 a 5-year status review was completed. The status review concluded that the threatened classification is still appropriate. Substantial progress on several major recovery actions has been made collectively by the Fish and Wildlife Service, the California Department of Fish and Game and other governmental, industry and conservation organizations. I would like to speak to two of these actions in particular.

One of the major threats to the southern sea otter population is the possibility of an oil spill from a tanker accident along the central California coast. One way to reduce their vulnerability to such an accident would be to establish a second, or reserve, breeding colony. We are currently considering a research project involving the translocation of a small number of otters to evaluate the feasibility of establishing and containing the new population within a specified area, the impacts of the otters on the ecosystem, and the effects on the otter population itself. Because of the highly controversial nature of and potential environmental consequences associated with translocation, the Service is preparing an environmental impact statement (EIS). A notice of intent to prepare an EIS was published last June and two public scoping meetings were held in July. An Interagency Project Review Team (IPRT) has been established to assist in defining the issues and alternatives that need to be addressed and to provide technical assistance in reviewing the EIS. The IPRT consists of representatives of the Minerals Management Service, Marine Mammal Commission, California Department of Fish and Game and U.S. Coast Guard,

with active involvement from interested conservation, oil and gas, and fishing groups. A preliminary draft EIS has been distributed for internal and IPRT comment. We are reviewing the large volume of comments received for preparation of a draft EIS to be released for public review and comment shortly.

In effect, this project would be a pilot study in zonal management of sea otters and could be conducted under authority for scientific research in the ESA and Marine Mammal Protection Act (MMPA). In addition, in conjunction with any decision to proceed with such a translocation, the Service proposes to promulgate special regulations under ESA section 10(j) which authorizes establishment of experimental populations. This will help to address concerns about the economic and other impacts of translocation, especially offshore oil development and military activities. Establishment of an experimental population requires a finding as to whether the new population is "essential" or "nonessential" to the survival of the subspecies in the wild. If found to be nonessential, the consultation requirements of section 7 do not apply to the experimental population except for animals found within units of the National Park or National Wildlife Refuge Systems. Let me note that permanent zonal management of the translocated population would likely be limited by provisions of MMPA that restrict taking to scientific research unless the population is within its optimum sustainable population level.

The second major issue is the accidental entanglement and drowning of sea otters in nearshore commercial gill and trammel nets. After 2 years of

a joint monitoring effort by the Service, State and Marine Mammal Commission, the extent of these losses was determined late last year and revealed that the losses are substantial. An estimated average of 80 sea otters have died in this way annually in recent years, representing a 6 percent annual loss. The Service has worked very closely with the State of California to restrict the fishing activity in a way that would stop the entanglement. In January, the Director of the California Department of Fish and Game invoked a 120-day emergency closure of the fishery within the otter's range as an interim measure. A bill now moving through the California legislature would close the otter's range permanently to large mesh gill and trammel nets.

The Service is proceeding on a number of other fronts to ensure protection and recovery of the sea otter. For example, we are informally consulting with the U.S. Coast Guard to determine whether a traffic routing scheme and offshore fairway system being considered by that agency along the central California coast may affect sea otters. We are working with the Minerals Management Service to review recovery needs and develop a program to enhance recovery of the sea otter. We are also working closely with the State and oil industry in developing interagency oil spill response plans that emphasize protection of the sea otter.

Cooperation with the States

As you can see, the success of conservation and restoration efforts for listed species depends, in large part, on maintaining a good working

relationship with our counterparts in the States. Under the authority granted in Section 6 of the Act, the Fish and Wildlife Service has reached final Cooperative Agreements with 44 States and U.S. territories, including 42 agreements for fish and wildlife and 18 for plants. Additional agreements are in various stages of development. All States with approved Cooperative Agreements may apply for section 6 matching grant-in-aid funds, which are allocated by the Service according to specific criteria, such as the relative urgency of the problems facing a species. A few of the species that we hope will benefit from projects being carried out this fiscal year are the bald eagle, Kirtland's warbler, several species of sea turtles, and the mountain golden heather.

In FY 1985, 146 separate conservation and restoration projects in 37 States were funded out of the \$4 million appropriated by the Congress. We are requesting that Congress authorize the same amount, \$4 million, for FY 1986, and funds as may be necessary in FY 1987-1989, to allow for the stability of State programs for endangered and threatened species, particularly multi-year projects. Since species recovery plans, once developed, are generally the foundation upon which the States build their own programs, such funding will be in keeping with our increased emphasis on recovering rare wildlife and plants.

Interagency Cooperation

Section 7 of the Act, which contains the interagency cooperation and exemption processes for actions having Federal agency involvement, was

substantially amended in 1982. A set of comprehensive regulations that implement these changes, along with modifications required by the 1978 and 1979 amendments to the Act, were proposed June 29, 1983. There has been widespread interest in the proposed regulatory changes and a large number of comments were received. The final rule is under review by the Departments of Commerce and the Interior, and we expect to have it out within several months. We believe the final regulations will be effective in minimizing the potential for conflict arising from proposed Federal agency actions.

As the numbers of listed species and Federal actions that may affect them increase each year, so do the numbers of section 7 consultations. The consultation process involves an exchange of information among the Service, the Federal agency, and any permit or license applicant. It is usually possible to resolve potential problems to obviate the need for a formal consultation, particularly when the Federal agency involved initiates informal consultations at an early stage in the planning process. This is illustrated by the fact that the number of informal consultations has increased on the average of about 40 percent annually since 1979, while the total number of formal consultations decreased 70 percent over the same period.

During FY 1984 the Fish and Wildlife Service participated in 8,165 consultations, all but 300 of them informal. Of the 300 formal consultations, 277 resulted in "no jeopardy" biological opinions, and "reasonable and prudent alternatives" for avoiding jeopardy were provided

for the great majority of others. The numbers of consultations needing time extensions has also decreased each year, and in FY 1984 the total was down to 27.

Another change mandated by the 1982 amendments to the Endangered Species Act was a significant streamlining of the section 7 exemption process, by which a cabinet-level committee may grant an exemption from a Secretarial determination under section 7 that an agency action will violate section 7(a)(2) of the Act. Regulations implementing these procedural changes were published on February 28 of this year. Section 15(c) of the Act authorized \$600,000 annually in FY 1983-1985 for the Endangered Species Committee to review requests for exemptions. However, funds for this purpose have been neither requested nor appropriated, since the Department of the Interior has received no exemption requests during this time. We view this lack of exemption requests as evidence that the interagency cooperation process is working well. Although no exemption funds are requested for FY 1986, we believe it is important to reauthorize this activity to ensure that the exemption process remains available, if needed. Accordingly, we request that such sums as may be necessary be authorized for this purpose under section 15(c).

Habitat Conservation Plans

For those actions or projects that do not involve Federal agencies, protection for listed species and their habitats can sometimes be gained

through a habitat conservation plan and the granting of a section 10 permit. The 1982 amendments added a provision to section 10 allowing the issuance of a permit for taking of an endangered species if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Prior to the 1982 amendments, a permit to take an endangered species could be issued only for takings for scientific purposes or to enhance the propagation or survival of the species.

In order to obtain such a permit, the applicant must submit a habitat conservation plan that promotes the long-term conservation of the species in the wild. The plan must include steps that will be taken to minimize and mitigate the impacts the action will likely have on listed species and their habitats, along with assurances that adequate funding for the plan will be provided. Such a plan has been written to conserve the unique flora and fauna of San Bruno Mountain in California, and others are being developed, such as for the Coachella Valley in southern California's Mojave Desert. The San Bruno plan was upheld in litigation in the Northern District of California and the case was argued in the Ninth Circuit on February 15, 1985. The outcome of this case of first impression will be very important to the section 10 program.

Law Enforcement

There is no question that a vigorous law enforcement effort is necessary for the success of the endangered species program. One area of special emphasis, protection of the threatened grizzly bear, is giving us

significant encouragement. Due to stepped-up law enforcement investigations and patrols, poaching of grizzlies has been declining in recent years. In fact, during 1984, there were no known illegal kills in the Yellowstone ecosystem. We plan to do everything we can to maintain this record of success. In addition, we have undertaken extensive public education efforts to reduce bear interaction with humans.

Other Service efforts in recent years are highlighted by cases such as Operation Trophykill, an investigation that detected poaching and illegal trophy importations of ocelot, jaguar, and other endangered spotted cats. One of the defendants, for example, was convicted on March 7, 1985, of seven counts of wildlife violations, including four felonies and was sentenced to serve 15 years in Federal prison.

Another of our law enforcement investigations concerning trade in endangered peregrine falcons and other protected birds, Operation Falcon, will be discussed later in this hearing. Raptors, such as falcons and hawks, first received protection under the Migratory Bird Treaty Act in 1972 when the treaty with Mexico was amended to include 32 additional families of migratory birds. Since that time, by regulation pursuant to the Migratory Bird Treaty Act, the Service has authorized falconers to engage in the sport of falconry as both a traditional and legitimate use of the resource. A falconry permit, most often issued jointly by the Service and the falconer's State wildlife agency, authorizes activities integral to the sport, such as the taking, possession, and transportation of raptors. Today, 42 States are part of a joint State-Federal falconry permit

program. At last count, there were over 2,200 licensed falconers. Similarly, since 1972 the Service has by regulation permitted raptor propagation or captive breeding of raptors. Today there are between 150 and 200 Federal raptor propagation permits outstanding.

Both the Federal falconry and raptor propagation permits contain detailed banding, recordkeeping, and reporting requirements in an attempt to insure compliance with limitations placed on taking raptors from the wild, as well as with prohibitions on the sale or purchase of such birds. The use of the bands, for example, is strictly regulated. Markers may not be removed and transferred to another bird, or reused if a bird dies. When a marker is placed on a raptor, the permit holder must file a written report with the Service and identify the marker number, species of bird, date banded, location, age, and sex. In effect, a marker serves to register a lawfully acquired raptor with the Service.

Whether to allow the sale of these captive-bred raptors was an issue that surfaced early, but was not resolved until recently. During 1983 the Service proposed and adopted new standards for raptor breeding that authorize raptor propagators to purchase, sell, or barter captive-bred raptors, including certain peregrine falcons exempt under the Endangered Species Act, but only when the birds are banded with a numbered seamless leg marker supplied by the Service. Propagators may sell these birds to each other or to U.S. falconers authorized to purchase such raptors.

The preceding discussion concerns regulated use, propagation and sale of raptors pursuant to the Migratory Bird Treaty Act. However, two raptor species are also listed under the Endangered Species Act. The Arctic peregrine falcon is listed as a threatened species and the American peregrine falcon is listed as endangered. In addition, all subspecies of peregrine falcons found in the wild in the conterminous 48 States are listed as endangered under the similarity of appearance provisions of the Endangered Species Act of 1973 because they are virtually indistinguishable from each other. In 1978, the Endangered Species Act of 1973 was amended to "exempt" peregrine falcons from the Act's prohibitions if the particular bird in question was held in captivity or a controlled environment on November 10, 1978, or is the offspring of such a bird. The effect of this amendment is to provide for the regulated use, propagation and sale of these birds, as with other raptors, under the Migratory Bird Treaty Act. The expressed purpose of the exemption was to alleviate some of the human pressures on wild raptors, to increase genetic diversity in captive populations, and to further encourage captive production of raptors for conservation, recreation, scientific, and breeding uses.

In response to information indicating a significant volume of illegal activity regarding raptors, a covert investigation known as Operation Falcon was initiated in the spring of 1981 and ended in 1984. Of the 48 individuals criminally charged in the United States so far, 37 have been convicted, 2 were acquitted, 8 (all foreign nationals) are fugitives, and 2 are awaiting trial (including 1 already acquitted on other charges). The sentences imposed to date are: \$220,625 in fines, 2 years

incarceration, over 42 years probation, and over 1,200 hours of community service. Most of the violations fall into three categories: (1) illegal taking of birds from the wild, and the illegal possession, transportation, sale or purchase of these birds; (2) the manipulation of Federal bands and the falsification of records to conceal or thwart detection of birds unlawfully taken from the wild or otherwise unlawfully acquired, in some cases by claiming the birds were captive-bred when in fact they were taken from the wild; and (3) outright smuggling of birds into and out of the United States.

In the months since Operation Falcon ended, the investigation has continued. Government agencies in foreign countries, including Canada, Iceland, the Federal Republic of Germany, Australia, the United Kingdom, France, Norway, Denmark, and Zimbabwe, have shown an intense interest in the case. In December 1984, representatives from six of these countries and the United States met in London to share information relating to illegal trafficking in raptors. Interestingly, much of the information collected by one country was often corroborated by another. Further meetings are expected to occur as they are needed.

Through Operation Falcon the Service has identified some regulatory problems. Among other things, we may need to look at recordkeeping, reporting, and banding requirements. The Secretary of the Interior charged the Service to review the existing regulatory mechanism and make any necessary changes. That review is underway. On January 4, 1985, the Service published a notice in the Federal Register of its intent to review

the Federal raptor regulations and solicited public comment. The public comment period has been extended to June 4, 1985.

While the great majority of those engaged in raptor propagation and associated activities are complying with the law, Operation Falcon has been highly successful in identifying geographically widespread illegal activity. The significant penalties imposed so far indicate that the courts consider the protection of our raptor resource to be a serious matter. We believe that these penalties and the fact that the Service is ready and willing to enforce the law will deter others from committing such violations in the future.

International Conservation Efforts

Since wildlife does not respect national boundaries, the maintenance of biological diversity is a matter of international concern. The Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, usually referred to as the Western Hemisphere Convention, seeks to conserve our region's native flora and fauna, including migratory birds, in the face of widespread habitat loss and environmental degradation. Nearly all of the countries in our hemisphere now are signatories to the Convention.

We have initiated a number of important projects to further the purpose of the Western Hemisphere Convention, with an emphasis on the training of local managers. For example, over 100 Latin American biologists from

20 countries have been able to attend U.S.-sponsored workshops on management of refuges, migratory birds, crocodilians, management planning, environmental education, and research techniques. The heads of most Latin American wildlife agencies have participated in these workshops. However, because we have sufficient existing statutory authority to undertake this important work, and because our FY 1986 budget submission does not contain a specific request for Western Hemisphere Convention activities, we do not believe that reauthorization of section 15(d) of the Endangered Species Act is necessary.

In addition to our activities in the Western Hemisphere, the Fish and Wildlife Service has taken advantage of the foreign currency authority in section 8 to implement a number of wildlife and habitat management, research, and training activities of benefit to threatened and endangered species in India, Egypt, and Pakistan. As these countries elevate their priorities for the maintenance of their living resources, we have been able to provide extensive assistance and support without an expenditure of U.S. dollars. Most recently, we assisted with initial planning for establishment of the first protected area ever in Egypt. Feedback and support from Ambassador Velioles on this project have been outstanding. Although we have employed in excess of \$4 million in foreign currencies over the history of this activity, it has not been a burden upon the Service because we work through private groups, foundations, universities, and research institutions to carry out our objectives.

Another agreement to which the U.S. is a Party is the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The agreement is implemented in this country through the Endangered Species Act. CITES, which now has 89 Parties, has become a leading instrument in the conservation of species threatened by trade. U.S. agencies involved with CITES include the Departments of State, Agriculture, Commerce, Interior (the actual U.S. Management and Scientific Authority), and Justice. CITES matters are discussed at regular biennial conferences (next conference scheduled for April 22 - May 3, 1985, in Buenos Aires, Argentina) and additional technical and administrative meetings.

Since 1982, the Parties have taken steps to improve implementation of CITES through: emphasis on complying with the permit requirements for international trade in plants; training seminars for plant/wildlife port inspectors and CITES administrators; production of an Identification Manual; compilation of a summary of Latin American wildlife trade laws; computerization and analyses of trade data; development of proposals for the ranching of green sea turtles and Nile crocodiles; and a quota system for trade in leopard trophies. Domestically, the Service administers a plant rescue center program that assigns confiscated specimens to botanical or zoological institutions. We have increased efforts to curtail illicit trade in protected species. The Service also oversees a tag program for CITES-regulated wildlife species (including bobcat, lynx, river otter, and American alligator) managed by the States, but exported from this country. A conclusion that may be drawn from these and other activities is that

CITES has come of age, and that the Parties are taking meaningful steps to regulate international trade in a rational manner.

Before closing, there are a couple of issues that we feel should be brought to your attention as matters of potential concern. One involves the enforcement of laws to protect bald eagles. On January 9, 1985, the Eighth Circuit Court of Appeals ruled in United States v. Dion, No. 83-2353, holding that the non-commercial taking of endangered or threatened wildlife by an Indian on the Yankton Sioux Reservation is a legitimate exercise of treaty rights, exempt from prosecution under various Federal statutes protecting wildlife. In terms of the protection and conservation of endangered and threatened species like the bald eagle, the decision could have serious implications. The unregulated taking of listed species could disrupt our ability to develop and implement recovery plans for such species, as well as significantly impacting the biology of the species.

The Department of the Interior has requested that the Department of Justice seek review of this ruling by the U.S. Supreme Court. We are hopeful that the Dion ruling will be overturned by the Supreme Court. Accordingly, we are not recommending any statutory amendments at this time. However, should the case not go to the Supreme Court, or should the Court rule adversely, we would consider appropriate statutory remedies.

Another subject of concern is the Minnesota wolf situation. Regulations published in 1983 for transferring primary management authority to the State of Minnesota contained a provision allowing for limited sport

trapping, as recommended by the recovery team. The Fish and Wildlife Service's experts believe that a regulated take of wolves could relieve pressure on livestock owners and help to create a more favorable public attitude toward the recovery of this animal. However, on January 5, 1984, the U.S. District Court for the District of Minnesota issued a ruling that prevents implementation of a wolf trapping season, a decision that was recently upheld by the Eighth Circuit Court of Appeals. We believe that this case forecloses a management option of potential value, but that further study is needed before a possible legislative remedy can be recommended.

Mr. Chairman, this concludes my prepared statement. I would be pleased to answer any questions you or any of the other Committee members might have. I would also like to add at this time that we appreciate your continuing support for the endangered species program, and we stand ready to assist in any way we can during the reauthorization process.



ADDRESS ONLY THE DIRECTOR,
FISH AND WILDLIFE SERVICE

United States Department of the Interior

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

JUN 04 1985

In Reply Refer To:
FWS/OES 920.2C
FWS 351

Honorable John H. Chafee
Chairman, Subcommittee on Environmental Pollution
Committee on the Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear Senator Chafee:

In response to your April 22 letter forwarding a list of questions concerning the reauthorization of the Endangered Species Act (Act), we are pleased to provide the enclosed answers. We hope this information is helpful. If we can be of any further assistance, please call on us again.

Sincerely,

Robert A. Geenty
Director

Enclosure

ANSWERS TO QUESTIONS SUBMITTED BY SENATOR JOHN CHAFEE

Western Water:

Question 1: How would you characterize the "Windy Gap" biological opinion?

Answer: The Windy Gap biological opinion addressed the impacts of a transmountain water diversion to listed fishes. The project sponsor agreed to offset the likelihood of jeopardy by agreeing to fund conservation activities. Since the sponsors agreed to make such alternatives a committed part of the project, a no-jejopardy opinion was issued.

Question 2: What is the rationale and authority for issuance of a no-jejopardy opinion that permits a project to proceed contingent upon an agreement to fund research to assess the project's impacts?

Answer: No biological opinions have been issued with no-jejopardy findings based on a commitment for research to study a specific project impact. Rather, the research was related to overall basinwide data needs for the endangered fishes. Indirect project effects were often impossible to measure and, looking at the long-run cumulative impacts of such, "no-jejopardy" opinions were issued as the project sponsor agreed to contribute funds to support research studies to obtain the data needed to address the fishes' needs.

Question 3: How will the execution of studies, which are not funded until water depletion has occurred, serve to promote the conservation of endangered species that may be adversely impacted by the project?

Answer: Conservation measures specified in biological opinions that evaluate water depletions are not limited to studies alone, but include other measures such as habitat manipulation, fish passage facilities, supplemental stocking, flow releases, etc. Additionally, many conservation measures are funded before the actual project water depletion occurs. The "Windy Gap" approach to conservation measures is designed to offset the likelihood of jeopardy and not necessarily to promote recovery for the species.

Question 4: What will you do if the studies demonstrate significant cumulative harm to endangered species from the projects which have been allowed to proceed?

Answer: We do not expect this to occur and believe that use of the Windy Gap approach has produced positive long-term benefits for the fishes. However, if impacts to listed fishes are detected that differ from those considered in the original biological opinion, the FWS can request reinitiation of Section 7 consultation, pursuant to 50 CFR 402.04(h), for those projects where discretionary Federal involvement or control remains.

Question 5: Were minimum flow criteria incorporated into the "Windy Gap" type opinions? If not, why not?

Answer: In several biological opinions, minimum flows were incorporated as conservation measures to offset the direct impacts of projects within occupied habitat. Minimum flow criteria have not been proposed in every "Windy Gap" type opinion because definitive biological and hydrological needs for these species are not yet available to generate minimum flow criteria in response to indirect effects for projects not located within occupied habitat.

Question 6: Is the FWS depending upon the provision of flows from existing and future Bureau of Reclamation projects while permitting private projects to go forward? Will the FWS continue to issue no-jeopardy opinions prior to obtaining anticipated flows from Bureau of Reclamation projects?

Answer: The FWS is not depending on provision of flows from Bureau of Reclamation projects while permitting private projects to go forward. The FWS plans to request time extensions consistent with the Act on any future consultations on large water depletions until the Upper Colorado River Basin Coordinating Committee plan is formulated. Should time extensions be rejected, the FWS would have to issue a biological opinion based on the best data available, taking into consideration all the alternatives and conservation measures that might be applicable. Hopefully, extensions will be granted as more options should be available for resolving this issue with the committee plan.

The FWS will phase out use of the Windy Gap approach as biologically acceptable alternatives are developed under the committee plan. However, during the "Windy Gap" phase-out period, there may be instances where no-jeopardy opinions could be issued on small projects such as mining operation depletions.

Question 7: Do you plan to continue the "Windy Gap" approach to resolution of western water-endangered species conflicts? Will you incorporate minimum flow requirements into future biological opinions? If so, do you feel that you have adequate biological data to justify such requirements?

Answer: As mentioned in the answer to question 6, the FWS plans to request time extensions on large depletions which hopefully will be granted until the Coordinating Committee plan is formulated. However, during the phase-out period, there may be a few instances where no-jeopardy opinions could be issued on small mining operation depletions.

Regarding incorporating minimum flow requirements into future biological opinions, when adequate biological data, which are being developed, compiled, and analyzed under the Coordinating Committee effort, are available for determining flow requirements for the species, such requirements will be considered in each Section 7 consultation, where applicable.

Question 8: Do you believe that the ecosystem conservation purposes of the Act can be achieved by implementation of the various "non-flow" alternatives under consideration?

Answer: The FWS believes that a combination of flow and non-flow alternatives will be necessary to bring about the recovery of the listed fishes.

Question 9: Which "non-flow" alternatives have the best chance of preserving the species in question?

Answer: As stated in our answer to question 8 above, non-flow alternatives alone will not be sufficient to preserve the species. Many non-flow alternatives are currently being addressed in the Upper Colorado River Basin Coordinating Committee effort, and to attempt to identify the "best" of these at this time would be premature. Some alternatives being considered are: physical habitat modification, modification of existing and proposed dams and diversion structures to provide passage for migration, and augmentation of endangered fish populations at specific locations.

Question 10: Has the Service issued any jeopardy opinions in the Upper Colorado River Basin since 1981? How does this compare to pre-1981 and how do you explain the difference?

Answer: Records in the FWS regional office in Denver indicate that biological opinions issued since early 1981 were no-jeopardy, because the project sponsor agreed to carry out measures necessary to offset the likelihood of jeopardy for the species; thus, the recommended conservation measures became part of the project. Section 7 consultations on water development projects in the Upper Basin first arose in 1977. From 1977-1980, the FWS issued 14 jeopardy biological opinions with respect to major water development projects. Limited data were available to support specific alternatives to offset project impacts, so general reasonable and prudent alternatives were proposed indicating that the Bureau of Reclamation should maintain the capability to provide needed flows or storage to replace depletions and to meet the fishes' needs. The later, smaller private projects which were given no-jeopardy opinions did not have the capability to provide such flows or storage so the so-called Windy Gap approach evolved. The Coordinating Committee effort followed which brings us to where we are today.

Question 11: Have you explored the option of Federal purchase of instream water rights? How about purchase by private conservation interests? Is this a feasible option?

Answer: The answer is yes to both questions; however, preliminary analyses indicate that this may be an extremely expensive option with potential, unresolved legal issues, e.g., whether fish conservation is deemed to be a beneficial use under State water law.

Question 12: Are the coordinating committees reviewing the possibility that State laws may need to be changed to aid in resolution of these conflicts?

Answer: Following the development and compilation of data by the Upper Colorado River Basin Coordinating Committee, and the subsequent development and delineation of proposed flow and non-flow alternatives, a legal subcommittee will be established to address this and other legal issues.

Question 13: Mr. Buterbaugh testified that the "Windy Gap" approach would be phased out as "biologically acceptable alternatives" are developed. Please explain the types of alternatives that you believe will be biologically acceptable.

Answer: The "biologically acceptable alternatives" referred to in this question are currently being developed through the Upper Colorado River Basin Coordinating Committee. It is premature to indicate which alternatives may be selected. However, examples of some being considered are: management of operations of existing reservoirs to provide improved habitat conditions for endangered fish, acquisition of water rights, delivery of water at critical times to critical localities, modification of existing and proposed dams and diversion structures to provide passage for migration, augmentation of endangered fish populations at specific locations, and physical habitat modifications.

Raptors:

Question 1: Do you believe that the current reporting requirements and marking techniques adequately protect the wild population of peregrines from illegal take and "laundering" through permitted breeding facilities? Please explain.

Answer: "Operation Falcon," the FWS' undercover investigation into illegal taking and commercialization of raptors, has documented instances of "laundering" of peregrine falcons and other raptors through permitted breeding facilities. It has also documented enforcement problems associated with the adjustable marker (band) currently authorized for use in both falconry and captive propagation. The FWS is analyzing the magnitude and extent of these violations as a part of its overall review of the raptor regulations. The wild population of peregrines in North America is, and has been in recent times, on the increase. Should it be determined that additional regulatory restrictions and/or changes in the reporting requirements or the marking techniques are needed to protect wild populations of peregrine falcons, those changes would be made.

Question 2: Do you believe your ongoing review and anticipated modification of existing regulations will resolve problems with abuse of the "raptor exemption" sufficiently so that legislative amendments are not necessary?

Answer: The regulations that implemented the raptor exemption of the Act became effective August 8, 1983. Although the FWS has documented instances of violations of those regulations, it is premature at this time for the FWS to state that "abuse" of the exemption through consistent and extensive improper use of raptors held under those regulations has, in fact, occurred.

The FWS is reviewing its raptor regulations generally, with emphasis on those regulations found in 50 CFR Part 21. Notice of this intent to review the regulations was published January 4, 1985, and the comment period for public input into this review process ends June 4, 1985. A committee has recently been selected to consider the comments as well as internal FWS data related to this review.

It would be inappropriate at this time for the FWS to conclude what, if any, changes are necessary until the public has completed comment and the committee has had adequate time to consider all the information. To the degree that the completed review process identifies needed changes in the regulations, those changes will be evaluated.

Question 3: Conflicting evidence was presented in testimony regarding the existing and anticipated contributions of private breeders to the restoration of wild peregrine populations. What are your views on this issue?

Answer: The FWS believes that the past and present contributions of the private breeder toward the restoration of wild peregrine populations have

been considerable. Private breeders donated or loaned to The Peregrine Fund the majority of the falcons that served as the initial breeding stock; thus, the majority of all peregrines released in the United States are the progeny of private breeders' (and/or falconers') birds or the progeny of their progeny. Falconers and private breeders largely developed, and continue to contribute to, the refinement of captive breeding and release techniques for peregrines. Private breeding facilities are useful as reservoirs for maintaining representatives from additional peregrine populations, thus increasing the potential genetic diversity of captive populations. Private breeders serve as a repository for falcons from The Peregrine Fund requiring special pre-release conditions, provide additional captive-bred birds to The Peregrine Fund for release when demand exceeds the Fund's production, and provide a necessary hedge against catastrophic loss of birds from major breeding facilities. These important contributions of private breeders are often overlooked if only the precise numbers of birds released to the wild are examined.

The FWS anticipates that the contribution of private breeders to the restoration of wild peregrines will increase in the future. As additional States initiate peregrine restoration projects or increase the numbers of birds released, it is likely that the additional demand for captive-bred peregrines will be satisfied by private breeders.

Question 4: In an enforcement action, who bears the burden of proof if the defendant pleads the exemption? Must the Government prove that the bird was not produced in captivity?

Answer: With regard to the exemption found in Section 9(b)(2) of the Act (16 USC 1538(b)(2)) that applies to certain raptors held in captivity, or to their progeny, the burden is on any person claiming the benefit of that exemption to prove that the exemption is applicable to the alleged violation as provided in Section 10(g) (16 USC 1539(g)). The burden of proof section reads in its entirety as follows:

In connection with any action alleging a violation of Section 9, any person claiming the benefit of any exemption or permit under this Act shall have the burden of proving that the exemption or permit is applicable, has been granted, and was valid and in force at the time of the alleged violation.

An explanation of this burden and its relationship to the raptor exemption was provided by Judge Hatfield in response to a question from the jury in United States v. Burt J. Loessberg, James E. Doyle, and Greg Moore, No. CR-84-51-GF (D. Mont. Dec. 7, 1984) (appeal pending), one of the prosecutions resulting from "Operation Falcon." In his defense, James Doyle attempted unsuccessfully to claim that the American peregrine falcon he purchased was an exempt bird.

Judge Hatfield explained the Government's burden of proof as follows:

[The] Government is not required to prove, beyond a reasonable doubt, that a raptor, which is the subject of the charge against that defendant, is not a raptor which was held in captivity on November 10, 1978, or the progeny of such a raptor. Rather, the Government is required to prove, beyond a reasonable doubt, that the raptor belongs to a species which is listed as endangered by the United States.

Question 5: What is your response to the argument that commercialization of threatened or endangered species is contrary to the purpose and intent of the Endangered Species Act?

Answer: The FWS does not believe that lawful commercialization of threatened and endangered species, including "exempt" listed raptors, is contrary to the purpose and intent of the Act. During 1983, the FWS proposed and adopted new standards for raptor breeding that authorize raptor propagators to purchase, sell, or barter captive-bred raptors, including certain peregrine falcons exempt under the Act, but only when the birds are banded with a numbered seamless leg marker supplied by the FWS. Propagators may sell these birds to each other or to U.S. falconers authorized to purchase such raptors. The legislative history of the raptor exemption enacted in 1978, for which these regulations were promulgated, expressly states that the purpose of the exemption is to alleviate some of the human pressures on wild raptors, to increase genetic diversity in captive populations, and to further encourage captive production of raptors for conservation, recreation, scientific, and breeding uses. The Service believes these purposes to be consistent with those of the Act.

However, as stated in our reply to question 2, the FWS is reviewing the existing regulatory mechanism. Since the public comment period does not close until June 4, 1985, it is premature for the FWS to comment on the extent of changes (if any) that may be made in the raptor regulations.

Question 6: It was argued during the hearing that the documented continuing increase in wild peregrine populations is evidence that the raptor exemption is not having an adverse impact. Do you agree with this conclusion?

Answer: As the raptor exemption provides for commercialization in peregrines (and/or their progeny) legally held in captivity on or before November 10, 1978, theoretically the exemption itself should not adversely impact wild peregrine populations. Rather, it should prove beneficial through alleviation of human pressures, increase in genetic diversity, and the captive production of peregrines for reintroduction projects. However, as Operation Falcon has shown, there has been an illegal take of wild peregrines that have been laundered through captive breeding facilities. While certain wild peregrine populations have demonstrated increases despite these illegal activities, the FWS believes that any illegal removal of peregrines from the wild has an adverse impact on the recovery of the population from which the birds were removed. The key

point of this issue is the accurate assessment of the degree to which peregrine populations have been negatively impacted by the illegal removal of eggs or young. To date, the FWS knows of no peregrine population that has suffered significant declines in the numbers of breeding pairs or young produced as a result of illegal activities associated with the raptor exemption. However, as suggested above, the FWS believes that any activity resulting in the loss of individuals from a listed population can delay the recovery of the population, and thus may be construed as having an adverse impact on the population.

Question 7: Will the developing identification techniques, such as foot printing and blood testing, have an appreciable effect in reducing abuse of the raptor exemption?

Answer: Techniques such as foot printing and blood testing will have to be examined more fully to ascertain their validity in reducing instances of band manipulation and the unlawful incorporation of wild raptors into captive-breeding programs.

Question 8: It was argued at the hearing that evidence of illegal take from the wild, "laundering" of birds, and commercial sale in Canada is reflective of conditions in the U.S. It was counterargued that differences in reporting and marking requirements between the U.S. and Canada make the comparison inappropriate. What is your view on this subject?

Answer: Although documented cases involving the taking of wild raptors, the "laundering" of them through captive-breeding projects, and the subsequent selling of them have occurred in both Canada and the United States, it is unclear at this time as to what conditions occur in each country that facilitate the misuse of these resources. While some persons claim that the reporting and marking procedures in the U.S. are more extensive than those found in Canada and, thus, discourage such violations, others maintain that the band distribution system in the U.S. contrasts poorly with the banding procedure in Canada. (Bands in the U.S. are issued directly to propagators upon request, but in Canada the bands are generally affixed by wildlife officials. However, in Canada, banding is not generally a predicate to lawful possession, but only to lawful exportation.) The forthcoming review of the raptor regulations in the context of the FWS' recent and on-going investigation into the illegal taking and commercialization of raptors should also focus on the weaknesses and strengths of the raptor management programs in Canada.

Question 9: How do you respond to the argument that the regulations implementing the raptor exemption have been in force for too short a time period to determine if it will work for the benefit of the species?

Answer: Although the regulations implementing the sale of captive-bred raptors took effect on August 8, 1983, the raptor exemption became effective when the Act was amended in 1978. Consequently, the upcoming review of the raptor regulations should include an examination of data and events occurring not only after August of 1983, but also before that date.

Additionally, more data are being received from the results of on-going FWS investigations and public responses to the review of Part 21 regulations announced in the Federal Register on January 4, 1985. As such, it is inappropriate at this time to draw conclusions about the full scope of the impact that the raptor exemption and complementary regulations under the Migratory Bird Treaty Act have had regarding benefits to the peregrine falcon.

Sea Otter:

Question 1: Please explain, for the record, the rationale behind selection of the San Nicolas site for translocation over the other alternatives.

Answer: First, to clarify for the record, San Nicolas Island has not been selected over other alternatives for a translocation site. No decision has been made, as we are following the National Environmental Policy Act (NEPA) process and preparing an Environmental Impact Statement (EIS) that evaluates a number of alternatives. The draft EIS is expected to be published for public review and comment later this summer or early fall. San Nicolas Island has, however, been identified as the FWS' preferred alternative, and this was noted and discussed in the June 27, 1984, Notice of Intent to prepare an EIS, published in the Federal Register. San Nicolas Island was one of four areas identified through a 3-year contracted study of potential translocation sites throughout the historic range of the species in Washington, Oregon, and California. In addition to San Nicolas, the study identified the northern coast of California, southern coast of Oregon, and northern coast of Washington as having high potential for a translocation. In identifying the most suitable sites, the study considered criteria such as habitat suitability, oil spill risks, fisheries conflicts, natural capacity of the site to limit dispersal of the otters (i.e., contain the translocated otters), ability to monitor and protect the relocated otters, and law enforcement capability. Of the four sites identified in the study that best met the criteria, San Nicolas Island was judged by the contractor and the FWS to be the all-around best site, but the Oregon and northern California sites are included as alternatives in the EIS.

Question 2: Is it possible for you to identify in advance the mitigation measures that will be required of oil, gas, and fishery interests if the translocation occurs?

Answer: In using the phrase "mitigation measures," we believe the question is referring to reasonable and prudent alternatives that could be undertaken by a Federal agency or applicant to avoid jeopardy to a listed species under Section 7 of the Act.

The Service would not have Section 7 consultation interaction with the fishery interests unless there is a Federal permit or authorization involved. Because incidental taking of sea otters in gillnets is known to be a problem, the FWS would likely request the State to restrict this type of fishing in the immediate vicinity of the released otters.

As for Section 7 requirements concerning oil and gas activities, we would expect that such requirements may change for activities proposed that would affect the parent population as the new (translocated) population becomes successfully established as a viable breeding colony. To be more specific than that would require more specific information about the proposed activities and the extent to which they would be expected to impact the parent population. It would also require making assumptions about the status of the parent population. As for the application of Section 7

regarding oil and gas projects that may affect the translocated population, this would depend on the "essential" or "nonessential" determination referred to in question 4. Advance identification of Section 7 requirements would require assumptions and information similar to that discussed above for projects affecting the parent population.

Question 3: Can you provide industry with legally binding assurances regarding what can or cannot occur within the proposed translocation area and other waters into which translocated animals may disperse?

Answer: The rulemaking procedure required for establishing an experimental population under Section 10(j) requires the FWS to specify the management restrictions, protective measures, or other special management concerns for that population. Basically, the final rulemaking would identify prohibited activities within the translocation area and the other waters into which the translocated animals may disperse. Beyond identification of prohibited activities (as described in Section 9 of the Act), if the experimental population is designated as "essential", Section 7 consultation requirements would apply, which means that, in order to identify activities that could or could not occur, a formal project proposal, Section 7 consultation, and Biological Opinion would have to be developed. In the proposed sea otter translocation plan, it would be the FWS' intent to establish two zones in which we desire to establish and contain otters, and another in which we would propose to keep otters from becoming established. We would identify in the rulemaking the activities that would not be permitted; this would, in a sense, represent an agreement that could only be changed by another rulemaking.

Question 4: In testimony before the House, the FWS indicated that different standards of consultation would apply depending upon whether the translocated population was declared "essential" or "nonessential." Why has the FWS not determined which designation will apply in this case? What factors will affect your decision and when will you make it?

Answer: The FWS has developed criteria for making that determination. The criteria were set forth in the preliminary draft EIS and proposed 10(j) rulemaking produced by the FWS in January 1985. The criteria set forth last January for making the decision are based on the status of the parent population, the degree to which known mortality factors are impacting the parent population, and the number of otters proposed to be removed from the parent population for translocation purposes. We know that the parent population has not grown in size for at least the last decade, and is believed to have declined. Very recently, it was determined that incidental entanglement of otters in commercial gillnets has resulted in the removal of 5-10 percent of the otter population annually since the early 1970's.

It is our contention that, if the loss of otters in gillnets continues at near the 5-10 percent per year rate, any additional removal of otters, such as for translocation purposes, would probably cause a downward trend in the parent population. In our view, this would necessitate an "essential" determination. If, on the other hand, the incidental take

of otters in gillnets is stopped or substantially reduced and no other factor is identified that would remove a large number of animals from the parent population other than for translocation purposes, the translocated population would be given a "nonessential" designation. At the present time, there is an emergency fishing closure in effect throughout nearly all of the sea otter's range and legislation is moving through the State legislature that would make the emergency closure permanent. If this bill is enacted into law, the incidental loss of otters in fishing nets would likely be dramatically curtailed, and a "nonessential" designation would be proposed in the draft EIS and 10(j) rulemaking later this summer or early fall. At the time of publishing the public review draft, the FWS would make a specific proposal as to whether the population is essential or nonessential. Since the draft EIS and proposed rule are both still in the formative stages, it is not appropriate to make a final decision on the essential-nonessential determination at this time.

Question 5: What would be the effect on FWS programs if Section 10(j) was amended to provide that all translocated populations were declared "nonessential," except in very rare circumstances?

Answer: At this time, this is impossible to assess. Only two experimental population designations have been made or proposed (the Delmarva fox squirrel in final and the Colorado squawfish and woundfin proposed), and in both instances these populations have been designated nonessential. The essential designation does not eliminate Section 7(a)(2) responsibility as does the nonessential finding, and this appears to be a primary concern of most cooperating agencies. It is impossible to predict how many cases will arise that involve full Section 7 protection for experimental populations; however, it should be pointed out that most States consider the experimental designation as a viable option only because Section 7 has been relieved. Therefore, it seems unlikely that the States would be willing to cooperate if an essential designation is the only option available. In summary, we anticipate most experimental populations will be designated as nonessential. As a matter of policy, the FWS agrees that the vast majority of experimental populations will be "nonessential." As stated in the preamble to the Section 10(j) regulations, "[a]n 'essential' experimental population will be a special case, not the general rule." (49 F.R. 33885, 33888--August 27, 1984)

Question 6: What is your response to the suggestion that all sea otters found outside the translocated area and the present range be declared part of a "nonessential" population subject to incidental taking?

Answer: The FWS would not at this time favor allowing incidental take of southern sea otters due to Marine Mammal Protection Act (MMPA) restrictions on all takes except scientific research. If statutory authority existed to allow incidental take within "containment" or "management" zones, the FWS would concur in the notion that sea otters found outside the translocation zone, but within a designated experimental population management zone, should be subject to incidental taking since the FWS would propose to recapture any otters found in this zone and return



them either to the parent population or the translocated population. The recapture effort would minimize the chance of otters being taken incidentally by any means.

Question 7: Will the FWS be able to commit sufficient dollar and manpower resources to insure containment of the translocated population?

Answer: It is the intent of the FWS to place funding for containment as a high priority within its current base funding level. We would also anticipate that the California Department of Fish and Game would use funding it receives under our Section 6 Cooperative Agreement to assist with the containment effort. In addition, we would seek out non-governmental funding sources. The FWS is committed to containment of the translocated population.

Question 8: What is your reaction to proposals that the Act be amended so that the more restrictive provisions of the Marine Mammal Protection Act do not take precedence (contrary to existing Section 17 of the Act) as it applies to experimental populations?

Answer: We believe the type of sea otter translocation the Service has in mind at present can be done within the legal requirements of the Act and the MMPA. The Department has recommended that the Act be reauthorized for 4 years without amendment, but has not taken a position during this Congress on specific proposals to amend the Act so that the more restrictive provisions of the MMPA do not take precedence where experimental populations are concerned. As a technical matter, such an amendment would give us broader authority to manage and contain a translocated sea otter population indefinitely, at least until the species was delisted and the more restrictive provisions of the MMPA would again take precedence.

Question 9: Service testimony before the House indicated that the NEPA review process may force postponement of the proposed translocation until fall 1986. How will this affect the sea otter recovery program?

Answer: Postponement of the proposed translocation until the fall of 1986 would serve to postpone the primary recovery task listed in the approved recovery plan by one year from the date originally provided to the House Merchant Marine and Fisheries Committee in 1984. While we cannot predict with any certainty what, if anything, such a delay could cause that would adversely affect the otter population, we can be certain that the longer translocation is delayed, the longer we run the risk of a major oil spill occurring near the mainland coast that could impact a significant portion of the only existing population. In 1984, for example, there were two major incidents along the coast which could have resulted in major impacts to the population: the near-grounding of the fully loaded tanker USNS Sealift Pacific near Point Sur in the otter's range, and the explosion and resulting major spill from the SS Puerto Rican outside of San Francisco Bay. In the latter event, had the spilled petroleum product traveled as predicted by the oil spill trajectory model, it would have contacted the sea otter range. Although, fortunately, the slick traveled in an

unpredicted fashion, it points out the problem of oil spill prediction and containment and the relative urgency for taking actions as expeditiously as possible to recover the southern sea otter population. With some 2,500 vessel transits each year along the California coast between San Francisco and Los Angeles (traversing adjacent to the existing sea otter range), the FWS places a high priority on providing security for this population, and translocation is one major step toward providing that security. However, the NEPA process is important for decision making and providing opportunity for public involvement, so the postponement until fall 1986 is considered necessary.

Question 10: What is your reaction to the concept of "zonal management" for southern sea otters? Would amendments to the ESA and/or MMPA be required to pursue a zonal management approach for sea otters?

Answer: The FWS has previously gone on record supporting the concept. A translocation to establish an experimental population, as presently envisioned, would actually be an experiment in zonal management. However, to pursue a fully operational zonal management program involving management of both a translocated and the parent population would, in our view, require a long-term plan and amendments to the MMPA. For a threatened species, zonal management could be carried out under the Act without amendments if it could be demonstrated to be necessary and advisable for the conservation of the species.

General Administration of the Act:

Question 1: Several witnesses expressed dissatisfaction regarding delays in listing, consultations, issuance of regulations, recovery planning, and recovery actions. What actions have you taken or are you planning to take to accelerate these processes within your obvious budgetary limitations?

Answer: Changes in the Act and administrative procedures have contributed to increased efficiency in the endangered species listing process over the past three years. Changes that have contributed to this increased efficiency include the following:

- a. Elimination of economic analyses in connection with listings not involving designation of critical habitat.
- b. Elimination of Environmental Assessments in connection with rules to effect listings.
- c. Development of a detailed procedural guide for Service personnel who prepare listing documents.
- d. Publication and periodic updating of comprehensive notices of review for candidate species of the United States.
- e. An increased emphasis within the program on the assessment and listing of species on an ecosystem-wide basis.

The greatest opportunity to increase the overall efficiency of listing probably lies in an increased emphasis on the assessment and listing of species on an ecosystem-wide basis. This should avoid duplication of efforts in status surveys and rule promulgations, and have the additional important benefit of contributing to sound management of important areas as ecological units, rather than for the benefit of only certain species.

We will continue to search for more efficient procedures in dealing with our listing task, within the constraints imposed by our need to base listings on adequate scientific information.

The FWS' record for formal consultation schedule adherence, as detailed under question 4, Consultation Issues, is very good. For the 922 formal consultations conducted in fiscal years 1982, 1983, and 1984, the average number of days it took to complete such consultations was 65.3.

The joint final Interagency Cooperation - Section 7 regulations are presently being reviewed simultaneously within the Departments of Commerce and Interior. We anticipate publication of the final regulations after review by the Office of Management and Budget.

The FWS has recognized the importance of recovery plans as guiding documents for recovering species since 1972 when the FWS developed its first draft

recovery plan. Although the FWS strongly encouraged their development and some plans were developed, the preparation of a recovery plan for a species was elective until the 1978 amendments to the Act. These amendments require the development of a recovery plan for every listed endangered and threatened species except when the Secretary determines that "...such a plan will not promote the conservation of the species."

As of the end of fiscal year 1982, the FWS had approved 66 recovery plans. This was for over a 6-year period. During the last 2 years, fiscal years 1983 and 1984, the FWS has completed an additional 95 plans for an increase of 40 percent in the number of approved plans.

In addition to the recent increase of approved plans, the FWS has also instituted procedures which should further expedite the preparation of plans. Most recovery plans can now be approved at the regional level rather than at the Washington Office level. This should reduce the time required to develop plans. To facilitate this procedure, revised recovery plan preparation guidelines have been drafted. These should be approved in the near future.

We feel that "recovery actions" directly parallel the development of recovery plans. The most significant section of a recovery plan is that portion listing the recovery tasks which must be accomplished to recover the species. By identifying and ranking the recovery actions to be accomplished, we can ensure that the most important recovery actions are undertaken first. For the last 2 years, we have been requiring the regional offices to report semiannually on their accomplishment of recovery actions. By ranking the actions to be undertaken and requiring semiannual reports on the status of these actions, we are confident that delays in recovery actions will be reduced to the minimum within given funding levels.

Protection of Plants and Candidate Species:

Question 1: Section 9 was amended in 1982 to expand protection afforded plants under the Act. Conservation interests are urging even greater protection, contending that malicious destruction, unrestricted collection and conflicting land uses are seriously affecting listed plant species. What is your reaction to these concerns?

Answer: In general, we view the loss of habitat and destruction of plants as a consequence of vandalism and changes in land use as a much more serious and widespread problem than that of collecting for horticultural purposes. Regrettably, there has not been a correlation between the prohibition on collecting endangered plants from land under Federal jurisdiction, which was added to the law in 1982, and improvement in the status of listed plants. However, we believe that extending the Act's provisions to private land with regard to collection or removal of plants without the consent of the landowner to be an unnecessary expansion of Federal law enforcement in an area where State laws and law enforcement mechanisms are more ideally suited to deter such conduct.

Question 2: What would be the enforcement implications of amendments to the Act such as those suggested by Mr. Bean which further extend protection for listed plants?

Answer: It would be difficult to gauge the enforcement implications of Mr. Bean's proposed amendment to Section 9(a)(2) that would prohibit the malicious destruction of listed plants without a clear legal definition of the term "malicious." It is not clear to us if a lack of knowledge on the occurrence of a listed plant or a lack of intent to destroy such a plant would affect whether or not an individual or agency would be in violation of the Act.

Question 3: What would be the management and enforcement implications of legislative amendments to the Act which would provide Category 1 candidate species with the same protection now provided those species formally proposed for listing?

Answer: The FWS presently includes candidate species that may be present within an action area in its species lists under Section 7(c). This procedure alerts the Federal agency of potential proposals or listings. This type of mechanism systematically informs Federal agencies when their planned activities are in the vicinity of the candidate species, without requiring conferral on species not yet proposed for public and interagency review. If the action agency requires further information on the impact of their actions on such species, the FWS would be available to provide further assistance. Accordingly, we do not believe the amendment proposed by Mr. Bean is necessary.

Currently, if listed species are present in an area where a biological assessment is required, proposed species are included in that biological assessment. The results of the biological assessment help the action agency

determine whether formal consultation is necessary for listed species or a conference is necessary for a proposed species. If only a proposed species is within the action area, a biological assessment is not required. By including Category 1 species in the same procedures for proposed species, the FWS would provide nonbinding advisory recommendations, if any, in the conference document.

Currently, if a conference is required for a proposed species, it is conducted at the same time as the formal consultation on listed species. If a candidate species is proposed for listing subsequent to formal consultation on a listed species, then the Federal agency must conduct a separate conference with the FWS if the above described trigger is met. Inclusion of Category 1 candidate species in the conference requirement could reduce the possibility that a separate conference could be required.

Cooperation with States:

Question 1: Concerns which have been raised relating to the Section 6 program include the inconsistent application of the criteria used in review of applications for cooperative agreements and the limited consideration of State priorities in selection of projects to be funded. Please explain the criteria used in review of State applications and project selection.

Answer: The criteria used to review State applications for cooperative agreements are stated under Section 6 of the Act and applied by the Department of Interior's Office of the Solicitor. These criteria include State authority to conserve resident fish, wildlife, and plants; an acceptable State conservation program consistent with the purposes of the Act; the authority to conduct investigations; the authority to acquire land for the conservation of resident species (excluding plants); and public participation in designating resident species as endangered or threatened.

Additionally, the allocation of funds for financial assistance to the States is based on criteria stated in Section 6. These criteria include the international commitments of the United States, the readiness of a State to proceed with a conservation program consistent with the Act, the number of endangered and threatened species within a State, the potential for restoring endangered and threatened species within a State, and the relative urgency to initiate a program or action to restore and protect a species to enhance survival. The FWS assigns national priorities to listed species based on the criteria published in Vol. 48, No. 184 of the Federal Register. These national priorities (based on threat to the species, recoverability, taxonomy, and species survival) are applied to all recovery actions proposed for listed species and take precedence over the recovery priorities established for individual States. While the FWS makes a concerted effort to financially support all State programs to some degree, the recovery needs of high priority listed species will continue to take precedence.

Question 2: What steps will you take to address these concerns?

Answer: The FWS will continue to adhere to the criteria established under Section 6 of the Act and the priorities described in the Federal Register. The FWS will also continue to make every effort to keep the States advised and up-to-date on FWS national priorities so they might better understand the project selection rationale we use. This will also enhance the States' ability to effectively coordinate and implement their Section 6 programs.

Consultation Issues:

Question 1: Do you think the early consultation process is working? How do you respond to the concerns of industry?

Answer: The early consultation provision was added by the 1982 Amendments. The FWS is trying to provide regulatory guidance through our Section 7 regulations. We are in favor of open access to the early consultation process by prospective permit or license applicants and will try to clarify this position in the final Section 7 regulations.

Question 2: What criteria do you use in developing "reasonable and prudent alternatives"?

Answer: In determining reasonable and prudent alternatives, two areas must be examined. The first is whether the alternative actions developed can be implemented in a manner consistent with the intended purpose of the action, and the second is whether the alternative actions avoid the likelihood of jeopardizing the continued existence of the listed species or the destruction or adverse modification of critical habitat.

It is in the first area where economic and technical criteria are considered. The FWS will involve the Federal agency and applicant, if any, in order to utilize their expertise. In addition, the Federal agency and the applicant (through the Federal agency) may request a copy of the draft biological opinion in order to review its contents.

Question 3: What guidance do you provide to your field offices to insure a reasonably standardized application of criteria?

Answer: The FWS' Washington Office continually monitors all biological opinions for consistency, and, should a problem arise, it can be resolved. Additionally, the Washington Office is in constant contact with the regional offices to offer guidance on policies and procedures. As a follow-up of this continual monitoring, the regional offices are evaluated every year. These evaluations include discussions on how the policies and procedures are used by these offices in conducting consultations.

Question 4: How well are you adhering to consultation schedules?

Answer: In the past 3 fiscal years, the FWS has conducted over 18,600 consultations, of which 922 were formal consultations requiring the issuance of a biological opinion. Of the 922 formal consultations, 103 (11 percent) were extended past the 90-day timeframe, and 40 percent of those were completed within 2 weeks after the 90 days. On the average, those biological opinions that exceeded the 90-day timeframe were issued within 33 days of the close of the 90 days. The average number of days for the completion of all formal consultations was 65.3 days. When consultations need more time for completion, extensions of up to 60 days are mutually agreed to by the FWS and the action agency. Any extension beyond 150 days must be approved by any permit or license applicant involved in the action. The FWS will continue to strive to issue all biological opinions within the 90-day timeframe.

International Programs:

Question 1: Service written testimony noted the important projects underway pursuant to the Western Hemisphere Convention. Yet, you have not requested funding to continue this work and have asked that Section 15(d) not be reauthorized. Why have you not requested funding for this program?

Answer: The FWS believes that the level of funding proposed in the President's budget is adequate to fulfill its mandates under the Western Hemisphere Convention, particularly in Mexico, without requiring a new budget start. This funding is requested under existing statutory authority, thus we believe reauthorization of Section 15(d) is not necessary.

Question 2: What will happen to the Western Hemisphere Convention projects which have not been completed?

Answer: While it is true that some projects initiated in FY 1985 will not be completed by the end of the fiscal year, the great majority will be. For those uncompleted projects, we are seeking to identify non-governmental interests that will assume responsibility for seeing those activities through to their conclusion.

Conservation Standard:

Question 1: Please explain the FWS' rationale for allowing the regulated take of threatened species under the Act. In particular, please describe how the harvest of grizzlies and wolves contributes to the maintenance and recovery of their populations.

Answer: The FWS has allowed the regulated take of threatened species when it contributes to the conservation of a listed species and is otherwise consistent with the Endangered Species Act. Section 4(d) of the Act authorizes the Secretary to issue regulations for a threatened species that are necessary and advisable to provide for the conservation of the species. The U.S. Court of Appeals for the Eighth Circuit recently upheld a ruling by the U.S. District Court in the Minnesota wolf case that Section 4(d) allows regulated take only when necessary to relieve population pressures among the species. The FWS disagrees with the interpretation of Section 4(d) issued by the eighth circuit and is not prepared to apply that holding to grizzly bears in Montana, which falls within the jurisdiction of the ninth circuit.

Limited hunting of grizzly bears has been permitted in Montana under a special rule in 50 CFR 17.40(b). This rule allows a harvest which, when combined with human induced mortalities from all other causes, cannot exceed 25 bears in any one year in northwestern Montana. In addition, the State of Montana has further imposed a limitation on the number of female bears that may be lost from the population. At the time the rule was issued, it was believed that some populations in northwestern Montana could withstand a limited harvest without harm to the chances for long-term survival of the bears. However, the Montana Department of Fish, Wildlife and Parks is currently developing a State Environmental Impact Statement covering their hunting and overall grizzly bear management program. This EIS will provide a basis for determining whether a regulated harvest is currently necessary and advisable for the conservation of the grizzly bear. Objectives for the hunt are the taking of both unwise and overly aggressive bears, which will reduce the potential for bear-human encounters that often result in bear mortality and public sentiment adverse to bear conservation.

The FWS also proposed in 1983 that the State of Minnesota be allowed to manage a public trapping program to take wolves in northern Minnesota. The objective of this program was to improve public acceptance of wolf conservation by people living within wolf range. Trapping was to be concentrated in historic livestock depredation areas and to be governed by a set quota. The FWS maintained that this taking would have no significant effect on wolf numbers and would have reduced illegal take of wolves. This program was proposed under the Secretary's authority set forth in Section 4(d) of the Act. Both the district court and the eighth circuit ruled, however, that the Secretary had misinterpreted his authority under Section 4(d), because no population pressures among the wolves were evident. The Service is revising the gray wolf regulations and will not provide for public trapping of wolves.

Question 2: Do provisions under Section 10(a)(1)(A) provide the Service with sufficient authority to continue regulated hunting or trapping of threatened species?

Answer: The U.S. Court of Appeals for the Eighth Circuit ruled in the wolf case that Section 10(a)(1)(A) "does not authorize the establishment of a public sport season" even where such trapping enhances the propagation or survival of the species.

Question 3: Are available data for wolves and grizzlies adequate to make the determination that populations can withstand limited harvest?

Answer: When the grizzly bear was listed in 1975, it was believed that the population in northwestern Montana could be conserved through a limited harvest as permitted under 50 CFR 17.40(b). Additional population data are being gathered at this time. As mentioned in the answer to question 1, the State of Montana will complete a State Environmental Impact Statement prior to setting 1985 hunting regulations for this species. This EIS will provide a basis for determining whether a regulated harvest of grizzlies in northwestern Montana continues to be necessary and advisable for the conservation of the grizzly bear.

Population figures on wolves in northern Minnesota indicate a stable or slightly increasing population of 1,200-1,400 animals. The FWS does not contend that population pressures exist in this population but does maintain that the Minnesota wolf can withstand limited harvest that will beneficially affect its status.

Testimony of
Richard B. Roe
Director, Office of Protected Species
and Habitat Conservation
National Marine Fisheries Service
National Oceanic And Atmospheric Administration
U.S. Department of Commerce

Before the
Subcommittee on Environmental Pollution
Committee on Environment and Public Works
United States Senate
April 18, 1985

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to offer the views of the Department of Commerce on the reauthorization of the Endangered Species Act of 1973. This Act is vital to the conservation of species of fish, wildlife, and plants that are threatened or endangered with extinction.

The authorizations for appropriations under Section 15 of the Act are scheduled to expire in 1985, and must be extended for important conservation programs to continue. The Department of Commerce recommends authorization of appropriations to this agency at \$2,775,000 for fiscal year 1986 and at such sums as may be necessary for fiscal years 1987, 1988, and 1989.

Over the past years, a number of amendments to the Act have been made to allow greater flexibility in resolving conflicts while preserving the original purposes of the Act to conserve species. Although the Act continues to be the subject of much controversy and discussion, it has, for the most part, worked well.

The National Marine Fisheries Service (NMFS) of the National Oceanic Atmospheric Administration (NOAA) is charged with conserving and protecting various marine species of fish, turtles, seals, porpoises, and whales that are threatened or endangered with extinction. Our efforts are focused on three major program areas -- listing, consultation and recovery. Today I will discuss some of the progress made in these areas including implementation of the 1982 Amendments to the Endangered Species Act.

LISTING

The listing process is the critical step in implementing the protections of the Endangered Species Act because it sets in motion the Act's other provisions including consultation and recovery. Section 4 of the Act, which governs listing, delisting and critical habitat determinations, was amended in 1982 to ensure that listing decisions are based solely on biological criteria, to streamline the process and to impose certain time constraints.

Regulations

In 1984, the Fish and Wildlife Service and NMFS published joint final regulations incorporating these amendments into the listing process. These regulations establish the criteria and procedures for determining whether species are endangered or threatened, designating critical habitat, for receiving and considering petitions, and conducting status reviews of species listed as endangered or threatened.

5-Year Status Reviews

We recently completed the 5-year status reviews of most species listed under NMFS's jurisdiction to determine whether a change in the listing status of any species is warranted. Based on these reviews, NMFS concluded that: the gray whale should be listed as threatened rather than endangered since it has recovered to near its original population size; the nesting population of olive ridley sea turtles in the western North Atlantic (Surinam and adjacent areas) should be listed as endangered rather than threatened; and, the Caribbean monk seal should be removed from the list since the best available information indicates that it is extinct. The NMFS expects to initiate these actions during the next year. The remaining species under NMFS's jurisdiction are appropriately listed.

Petitions

The Act allows interested persons to petition to add or remove species from the list of endangered and threatened species. If the petition presents substantial information indicating that the proposed action may be warranted, the agency reviews the status of the species to determine whether a change in listing should be made. Over the past three years, NMFS has responded to eight petitions, four of which resulted in status reviews. Based on these reviews, NMFS listed the cochito, a Gulf of California harbor porpoise, as an endangered species, proposed to list the Guadalupe fur seal as a threatened species, and determined that listing the North Pacific Fur Seal and striped bass under the provisions of the Act was not warranted.

CONSULTATION

Section 7 of the Act requires all Federal agencies, in consultation with the Secretaries of the Interior and Commerce, to insure that their actions are not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of the critical habitat of such species.

Regulations

Federal agency authority and responsibility under Section 7 have remained intact from the 1973 Act; however, amendments to the Act have modified the consultation requirements of Section 7. Many of these changes are designed to improve interagency cooperation by streamlining the consultation process. We have worked with the Fish and Wildlife Service in developing joint regulations implementing the changes required by these amendments. Proposed regulations have been published and have received extensive review by Federal and State agencies, the environmental community, industry and other interested parties. We anticipate publishing final Section 7 regulations in the near future. We believe that the final rule will further clarify Federal agency consultation requirements under Section 7.

Consultations

The consultation process has worked well for Federal actions affecting listed marine species. Since 1982, we have received 1,073 requests for consultation. NMFS has encouraged agencies engaged in actions or programs that may affect listed species or their habitat to initiate consultation during the planning stages

of their activities. This approach has allowed us to assist Federal agencies in planning their activities to avoid adverse impacts to listed species. As a result, the majority of the consultations were conducted informally and did not require preparation of biological opinions. There were 78 formal consultations conducted during this period, of which 61 resulted in "no jeopardy" determinations, 16 found "jeopardy", and 1 concluded that there was not enough information available to ensure no jeopardy to listed species involved. Reasonable and prudent alternatives were provided in all "jeopardy opinions" and were adopted in all but one instance.

Although the consultation process has resulted in modifications to a number of projects, NMFS has rendered only one jeopardy finding that contributed significantly to a Federal agency denial of a permit to conduct a proposed activity.

RECOVERY

The ultimate goal of all activities under the Act is to restore listed species, stocks, or populations to the point where protective measures are no longer necessary for the species to be a self-sustaining part of its ecosystem. In some cases, however, the immediate goal may be to prevent its extinction.

Hawaiian Monk Seal

NMFS remains particularly concerned over the status of the endangered Hawaiian monk seal and has developed, and is implementing, a recovery plan for this species. Major efforts in

recent years include: (1) research to assess the status and trends of the population including age-specific survival and mortality rates; (2) a head start program at Kure Atoll to maintain monk seal pups in captivity for a short time to increase the probability of their survival; and (3) the identification of male monk seals responsible for attacks on females and immature seals at Laysan Island and the development of a project intended to reduce mortalities by removing these males from the population.

NMFS has also proposed that certain waters and lands of the Northwest Hawaiian Islands be designated as critical habitat for the monk seal. Since much of the species' range includes the Hawaiian Islands National Wildlife Refuge, the Fish & Wildlife Service cooperates, through consultation and research programs, in conservation efforts for the Hawaiian monk seal.

Sea Turtles

Recovery Team/Plan

The recovery team has completed a Marine Turtle Recovery Plan that identifies actions that can be taken by various Federal and State agencies to promote the recovery and conservation of the six species of sea turtles found in the Atlantic. NMFS has provided administrative and financial support for this long-term effort. We have approved the Recovery Plan and have begun implementing recommended actions.

Headstart Program

Since 1978, NMFS has participated in a program in cooperation with the Government of Mexico, U.S. Fish and Wildlife Service, National Park Service and State agencies in Texas and

Florida to prevent the extinction of the Kemp's ridley sea - turtle, the most endangered of the marine turtles. NMFS has been rearing young Kemp's ridleys in captivity during their critical first year of life, then tagging and releasing them into the Gulf of Mexico. The goal of this headstart program is to establish a new nesting colony on Padre Island, Texas, which is within the former nesting range of the species. Some Kemp's ridleys from the headstart program have been distributed to a number of marine aquaria and the Cayman Turtle Farm as a potential captive breeding stock. One 5 year-old ridley nested at Cayman Turtle Farm in 1984. This represents a major breakthrough in the recovery program because it sets the stage for captive breeding as a "safety net" for the species.

Trawling Efficiency Device

NMFS has undertaken additional measures to protect sea turtles including the development of the trawling efficiency device (TED). We estimate that approximately 12,600 sea turtles die annually in shrimp trawls and an additional 33,000 are captured and released alive. The TED excludes about 97 percent of all sea turtles that are captured in trawls and increases shrimp catch up to seven percent. The device also reduces unwanted bycatch, reduces trawl drag and may result in fuel savings. NMFS is continuing its efforts to promote voluntary use of the TED. Because of the ancillary benefits to shrimp trawling operations, we believe that shrimp fishermen will adopt use of the device voluntarily thereby reducing the incidental take and mortality of sea turtles.

State Cooperation

Recently, NMFS entered into a Cooperative Agreement with South Carolina under Section 6 of the Act to promote the conservation of endangered and threatened species. To enter into an agreement, a State must have an adequate and active program for the conservation of resident endangered and threatened species. The agreement establishes a framework for State-Federal cooperation in research, enforcement and recovery efforts.

International Activities

Our international efforts regarding endangered species include encouraging research and conservation of endangered and threatened species; participating in the International Whaling Commission; and, assisting the Department of the Interior in administering the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES). We have also participated in the Western Atlantic Turtle Symposium sponsored by the Intergovernmental Oceanographic Commission Association for the Caribbean and Adjacent Regions (IOCARIBE) and the Wider Caribbean Sea Turtle Conservation Network.

NMFS recently signed a Memorandum of Understanding (MOU) with the U.S. Fish and Wildlife Service and the Cayman Islands Government to promote the conservation of sea turtles in the Caribbean and the Western North Atlantic regions. The MOU falls within the scope of Section 8(b) of the Act which, among other things, provides the Secretary with the authority to enter into

agreements with foreign countries for the purpose of conserving endangered and threatened species. We believe that this agreement will enhance conservation efforts for migratory sea turtle species.

Enforcement

Enforcement of the Act is a critical component necessary to promote the recovery of endangered and threatened species. Enforcement activities include investigation and control of illegal taking and control over importing and exporting activities. There are 93 NMFS Special Agents located in 41 coastal field stations throughout the country whose duties, among other things, include enforcing the Act. Cooperation between NMFS Special Agents and State conservation officers in most coastal states is improving each year. The NMFS has cooperative enforcement agreements or memoranda of understanding with 13 coastal States to assist in carrying out the enforcement provisions of the Act.

Certificates of Exemption

In 1976, the Act was amended to allow persons who held quantities of certain pre-Act endangered species parts to obtain certificates of exemption giving them a 3-year period to sell their stocks through exportation or interstate commerce. NMFS originally issued a total of 58 certificates of exemption under this program to persons holding stocks of sperm whale oil, spermaceti, whale teeth, whale bone and baleen. The certificates were extended for an additional 3 years under the 1979 amendments to the Act. Several certificate

holders, including all those who held whale oil and spermaceti, have depleted their stocks. Only 37 certificates remain in effect.

The 1982 amendments to the Act allowed for another 3-year extension of the certificates. NMFS has published regulations putting this extension into effect and that impose additional restrictions on the conditions under which certificate holders may dispose of their inventories. Also, in order to facilitate enforcement, these regulations require certificate holders to keep more detailed records and to provide NMFS with quarterly reports of their activities.

Permits

Issuing permits provides another means of fulfilling our conservation responsibilities under the Act. In particular, permits for scientific research and enhancement of the survival of endangered species are an integral part of recovery programs. Permits also provide an essential element of control over activities that could result in adverse impacts to endangered and threatened species.

The 1982 amendments added a provision to the Act authorizing the Secretary to issue permits to take endangered species incidental to an otherwise lawful activity, provided such taking will not appreciably reduce the likelihood of the survival and recovery of the species and that the applicant will implement conservation measures to mitigate the impacts of such takings. NMFS is developing regulations to implement these Amendments and

anticipates publishing a proposed rule later this year. Permits issued under these regulations could be used to allow commercial and recreational fishermen and others to conduct their activities without risk of prosecution for incidentally taking certain endangered species. We believe that this process will contribute to the acquisition of valuable information on endangered species taken incidental to these activities.

Mr. Chairman, I believe that the Act has been working well with respect to marine species and urge that authorization of this Act be extended for a period of 4 years.

This concludes my prepared statement. I thank the Subcommittee for the opportunity to appear here today, and I will be pleased to answer any questions.

STATEMENT OF DR. TOM J. CADE, PROFESSOR OF ORNITHOLOGY, CORNELL UNIVERSITY AND PRESIDENT, THE PEREGRINE FUND, INC., CORNELL LABORATORY OF ORNITHOLOGY, ITHACA, NEW YORK, BEFORE THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS, SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION, ON REAUTHORIZATION OF THE ENDANGERED SPECIES ACT AND THE "RAPTOR EXEMPTION." 18 April 1985.

Mr. Chairman and members of the Subcommittee, I thank you for the opportunity to appear here to comment on the reauthorization of the Endangered Species Act. I speak for The Peregrine Fund, Inc., a non-profit, publicly supported organization which we formed more than 10 years ago to aid in the recovery of the endangered Peregrine Falcon in the United States, through the propagation of falcons in captivity and the establishment of captive produced falcons in the wild. Currently we operate three regional programs--one for the eastern United States headquartered at Cornell University, my home institution, one at our newly created World Center for Birds of Prey in Boise, Idaho, where falcons are raised for release in the Rocky Mountains states, and one for the west coast states located at the University of California, Santa Cruz campus, the Santa Cruz Predatory Bird Research Group.

Since 1975 The Peregrine Fund has raised and released to the wild more than 1,400 Peregrine Falcons, and we have also been intimately involved in all other aspects of the North American effort to conserve and to restore this species in nature--including some of the early work on pesticide analysis and monitoring, habitat studies, population surveys, manipulating the reproduction of wild pairs, and even some field assistance with law enforcement activities in Alaska and Canada. Consequently, our organization is in a good position to evaluate the practical, day-to-day working of programs supported under the authority of the Endangered Species Act.

The Peregrine Falcon as a species is making a steady and encouraging recovery in North America as a consequence of all the work that has been devoted to its conservation since 1965, the year when ornithologists and conservationists finally came to realize the devastating effects that DDT was having on Peregrine populations in North America and Europe. The Arctic and boreal populations of Canada and Alaska have increased sufficiently since the ending of major DDT use in the early 1970's, so that the so-called "tundra race" of the Peregrine could be down-listed from "endangered" to "threatened" in 1983. Even in the United States south of Canada, where the Peregrine has

been most severely endangered by DDT, the species is beginning to show an increase in the number of nesting pairs. In the East, where the Peregrine had been entirely extirpated as a breeding bird until 1980 when the first of our released falcons nested successfully, there were at least 27 territory-holding pairs in 1984, and sixteen of them produced 30 young. This newly established eastern population appears to be doubling in size about every two years, so that by 1988 we should have 100 to 120 pairs re-established, if we can continue to release about 100 captive raised birds into the wild each year.

In the Rocky Mountains region, released Peregrines are now nesting in states like Montana, Wyoming, and northern Utah where wild falcons have not been known to breed for many years, and in Colorado the number of nesting pairs has increased from four to 13 since we began working in that state in 1974. On the central coast of California where 17 pairs once nested before the DDT era, the population has increased from one or two non-productive pairs to 14 occupied territories since the first captive produced birds were released there in 1977, and new pairs are nesting as far south as the Los Angeles metropolitan area.

The prognosis for a full recovery of the Peregrine Falcon in North America is very good, if we can just continue the lines of action that have been specified in the official recovery plans which were developed under the authority of the Endangered Species Act, especially as mandated in the 1978 amendments.

The Peregrine Fund, Inc. has not accomplished all these good results by some heroic, single-handed effort. We have had a lot of help and cooperation from a great diversity of agencies, organizations, and private individuals. It is a pleasure to acknowledge the indispensable help that two of the other organizations on this panel have provided--the National Audubon Society, on the one side, and the North American Falconers' Association, on the other. The Audubon Society has helped us out financially--particularly with the construction of facilities in Colorado--but even more, I think, by the moral support which their early endorsement of our program gave just at the time when we most needed to establish credibility in the conservation community. I especially remember the strong encouragement received from men such as Charlie Callison, Roland Clement, and Elvis Stahr. The falconers have helped

tremendously, too, with many practical aspects of the program, and I will have more to say about them in a moment, as well as with their money.

There are many other helpers that I wish I had time to name--federal and state agencies, other conservation organizations, corporations, foundations, and several thousand private individuals. We try to acknowledge all of these folks publicly, Mr. Chairman, in our annual Newsletter, and I would like to call the Subcommittee's attention to our 1984 issue and ask that it be included as a part of the record of this hearing. I note that it includes an acknowledgement to more than 108 cooperating government agencies and organizations, more than 90 contributing foundations, corporations, and conservation groups, and more than 1400 private contributors. The Congress of the United States should also be acknowledged, since it has seen fit to make a special, add-on appropriation of some \$200,000 to \$300,000 per year for falcon propagation and release each year since 1981.

This national effort to restore the Peregrine Falcon, and other similar efforts for endangered species, owe much of their success to the special ethical imperative of the Endangered Species Act. The Act, of course, has important and necessary funding authorizations for endangered species programs, but more than that it has a voice that places a special responsibility on all departments and agencies of the federal government to help out, as well as on States and "other interested parties" in the private sector. One of the most significant sections of the Act is the policy set forth in Section 2(c): "It is further declared to be the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act." That means that even the Secretary of the Army can do something to help endangered species on properties under his jurisdiction. If he chooses to do so, he can use the Act to authorize ethically responsible actions to protect endangered species. Through the Section 6 provisions for financial cooperation with States, the Section 7 provisions for interagency cooperation, and other sections of the Act, all elements of American society are afforded an opportunity to participate in the conservation of endangered species.

Furthermore, the Act is significant in the way it views conservation. It is more than mere preservation of the status quo; it embodies the concept--the goal--of recovery. According to the official definition in Section 3(2)

conservation means "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary." Thus, the delisting of the Peregrine Falcon as an endangered or threatened species remains the ultimate goal of our efforts.

While there have been some instances in which the government's methods of carrying out the mandate of the Act have caused conflicts of interest, most of these cases have been satisfactorily resolved in time, and we feel that second only to the Migratory Bird Treaty Act, the Endangered Species Act is the most significant piece of wildlife legislation ever enacted by the U. S. Congress. We strongly urge your committee to reauthorize the Act as currently constituted, including all of the 1978 amendments to the original Act of 1973. We do ask your Subcommittee to consider the authorization of increased funds for implementation of the Act, particularly so that (1) the Departments of Interior and Commerce can speed up their listing decisions, (2) the Departments of Interior, Commerce, and Agriculture can effect the many recovery plans that have already been approved but never implemented, and (3) to enable the States to build effective endangered species programs to supplement the federal effort.

I would like to direct my final remarks to the so-called "raptor exemption," which is found in Section 9(b) of the Act as amended in 1978, as this exemption seems to be the cause for concern in some quarters. The Peregrine Fund, Inc. supported the raptor exemption in 1978, and we strongly urge the continuance of this exemption in the reauthorization of the Act in 1985. Essentially all this exemption does is to transfer regulatory authority over raptors of an endangered species held in captivity prior to November of 1978, and their progeny, from the Endangered Species Act to the Migratory Bird Treaty Act. It has been incorrectly stated in other testimony that the raptor exemption permits interstate transport and sale of exempted Peregrine Falcons. The exemption itself does not address the issue of commercialism. Authorization to buy and sell Peregrines is provided only by regulations promulgated under the MBTA (50 CFR 21.30). Anyone concerned about the buying and selling of captive raised Peregrines should petition the U. S. Fish and Wildlife Service to modify the regulation, not the Congress to repeal the raptor exemption, which provides for many other desirable activities in addition to the potential for legal commerce.

The reasons for continuing the raptor exemption today are the same as those that were set forth and accepted by the Congress in 1978. They are: (1) To encourage the captive breeding of raptors (specifically, Peregrine Falcons) for purposes of conservation, recreation, and science, particularly by making federal permits for private breeders easier to obtain; (2) to increase the genetic diversity in captive populations by allowing for a larger total captive population than can be accommodated by the limited space in institutional facilities; and (3) to reduce the demand for human use (falconry) of wild raptors by making captive produced ones readily available.

Prior to the raptor exemption it was necessary for anyone holding or attempting to breed Peregrine Falcons--other than pre-Act birds--to operate under an endangered species permit. Such permits require a very formal review, including publication in the Federal Register, and they are extremely difficult to obtain, especially by private individuals. Further, they are usually quite restrictive in their provisions. One of the chief benefits of the raptor exemption is that it allows both private and institutional breeders to operate under federal permits issued under the authority of the MBTA regulations. For a number of years these permits were issued by regional law enforcement offices as Special Purpose Permits (50 CFR 21.27), and since 1983, as Raptor Propagation Permits (50 CFR 21.30). These federal permits, along with parallel state permits, have allowed for the exchange of birds among permittees, including movement across state borders, and the easy movement of birds from one state to another for the purpose of release to the wild. Thus, they have had an important impact on facilitating the propagation and reintroduction of Peregrine Falcons in the United States.

It has been stated in testimony before Congressional committees that the raptor exemption does not benefit wild Peregrine populations because falconers and private breeders have made no significant contributions to captive propagation or to reintroduction--that the only important work along these lines has been done by The Peregrine Fund, Inc. I should point out most emphatically that no one in The Peregrine Fund has ever made such a claim, and it simply is not true.

The idea to breed Peregrines in captivity took hold in a concerted way in 1965 at the end of the Madison Peregrine Conference, which had been organized by Professor J. J. Hickey and sponsored in part by the National Audubon

Society. A group of attending falconers and scientists got together and decided that one way to save the Peregrine from extinction would be to organize a continent-wide effort to breed the falcon in captivity. From that meeting arose an international organization known as the Raptor Research Foundation, Inc. It was started mainly by falconers, and during the 1960's and 1970's it was responsible for integrating the activities of private and institutional breeders in the United States and Canada and in making sure that new information on techniques and methods spread quickly among the breeding projects. The Foundation will celebrate its 20th anniversary in November of 1985.

The Canadian Wildlife Service's Peregrine breeding and reintroduction program, which has now released about 600 birds to the wild, had its origin at that meeting in Madison, for Richard Fyfe was one of the participants. Bill and Lucille Stickel were there from Patuxent, and plans for the Fish and Wildlife Service's endangered raptor breeding projects were certainly stimulated in no small measure by the discussions at the meeting, and The Peregrine Fund's initial program at Cornell University also grew out of the decisions reached in Madison. In addition, several other individuals were there who became important private breeders.

When I began the program at Cornell in 1970, I had in my own possession exactly two pairs of Peregrine Falcons, which had been taken as youngsters in the late 1960's from the Colville River in Arctic Alaska. Nearly all of the additional breeding stock that we were able to assemble at Cornell in the next five years came from falconers who either donated their birds to the program or put them on long term loan. If it had not been for Jim Weaver's ability to persuade his friends in the falconry community to trust us enough to put their Peregrines under our management, we simply would never have been able to achieve the results that we eventually were able to obtain.

The figures speak for themselves. Out of a total of 66 Peregrines held for breeding stock at Cornell in 1984, no fewer than 45 (68 per cent) came from falconers or private breeders or are the progeny from their birds. At our Boise facility, 87 (more than 74 per cent) of 117 Peregrines currently held are in the same category, while in California the comparable figures are 18 (45 per cent) out of 40 breeders. On the order of 70 to 75 per cent of all Peregrines that have been released in the United States are the progeny of falconers' birds or the progeny of their progeny. In addition,

private breeders (falconers) have contributed a total of 23 young Peregrines for release in California, 20 in the Rocky Mountains, and 40 in the East (net of only 15 since ~~16~~ Cornell young were exchanged).

The contribution of private breeders to reintroduction will certainly increase in the years ahead, as evidenced, for example, by the recovery program in the State of Minnesota. The State Department of Natural Resources and the University of Minnesota jointly sponsor the release of Peregrines which come entirely from the purchase of young raised by private breeders. Since 1982 the State has purchased a total of 31 Peregrines, and it plans to obtain at least 27 for release in 1985. A similar program is about to get under way in Missouri, and another is under active consideration in Illinois.

In addition to their direct donation of birds to The Peregrine Fund or for release to the wild, the private breeders have also made important contributions to the technology of raptor breeding. By the time The Peregrine Fund had produced its first Peregrines in 1973, at least six private breeders in Europe and North America had already successfully raised Peregrines in their "backyard projects," and some of the methods they developed are still in use today. Private breeders, who can often devote more individual attention to their birds than is possible at large, institutional facilities, have been particularly innovative in such techniques as using sexually imprinted raptors for artificial insemination, in improving methods for artificial incubation, and in hand-rearing young.

Private breeders also provide extra space for surplus birds that The Peregrine Fund and other institutional programs do not have the facilities to keep. This is one of their most important functions in terms of the need to maintain sufficient genetic diversity and numbers in the captive population to avoid inbreeding problems in future generations. Such birds or their progeny are recalled as needed to fill vacancies in The Peregrine Fund's breeding stock or to add new genes to our limited breeding population. Private breeders are also often willing to take over the responsibility of caring for injured birds that require special handling--either for rehabilitation or for breeding. Some have become quite adept at getting progeny from these injured birds. There is one productive pair in which both mates are blind in one eye. Some of their perfectly normal offspring have been released in our eastern reintroduction program.

All of these contributions by private breeders are made possible by the raptor exemption and by the captive breeding regulations of MBTA, and they

are powerful arguments for continuing the exemption and the regulations intact.

It has also been stated, Mr. Chairman, that the raptor exemption and the new captive breeding regulations make effective law enforcement to curtail the illegal take of wild Peregrine Falcons virtually impossible and that they should be revoked on that account. I believe that just the reverse argument is the more cogent one.

Leaving for others to correct the many misstatements we have read about the use of bands to identify captive bred raptors and how they can be used illegally on wild birds, the fundamental point is that laws or regulations are only as good as the will of the people is to abide by them. Laws should be made to benefit the vast majority of folks who are honest enough to abide by them, not to make it absolutely impossible for a miscreant to violate the law without getting caught. No law can be that perfect. Individuals with criminal impulses will violate any law if they think it is to their advantage to do so. Peregrine Falcons were taken illegally from the wild before the raptor exemption of 1978, they have been taken since then, and they will continue to be taken in the future regardless of what the laws and regulations are. The way to reduce the illegal take to an acceptable minimum is, first, to keep open some avenues for legal acquisition, as the captive breeding regulations attempt to do; second, to develop some really effective methods of law enforcement; and third, to increase significantly the punishment exacted against the professional poachers and traffickers who are found guilty of violating the laws.

Revocation or modification of the raptor exemption or the captive breeding regulations would have the effect of curtailing the activities and rightful interests of the vast majority of breeders and falconers who are honest and who would feel compelled to abide by the restrictions, but it would not stop the professional traffickers and international smugglers who are making big profits from their illegal dealings in falcons. Indeed, there is good reason to believe that such restrictions would only make their business better. The demand for illegally taken birds would increase, the prices would rise disproportionately to the risks of getting caught or of being severely punished if caught, and so the incentive for illegal operations would become greater, and more birds would be taken illegally from the wild than will be the case if the exemption and the breeding regulations remain in effect.

We have already seen how this positive feed-back system works when the

Peregrine was placed on the Endangered Species List and on Appendix I of CITES and when the Gyrfalcon was placed on Appendix I of CITES. Before the CITES convention was ratified, Peregrines could be purchased legally on the open markets of Pakistan and the Middle East for around \$50 to \$100. With international protection and the virtual elimination of any legal acquisition of birds, the prices quickly jumped into the thousands of dollars per bird in the black market trade, further fueling the incentive for illegal taking. Gyrfalcons went from a few thousand dollars to tens of thousands. The same effect of complete protection has been seen in other species of endangered wildlife for which there has been a historical and culturally determined market.

The solution for achieving significant curtailment of the illegal trade in wild falcons lies not in some legislative or regulatory "fix," but rather in more effective and consistent law enforcement and in much stiffer penalties for convictions. Unfortunately, covert actions such as "Operation Falcon" which employ indiscriminate "stings" and which are often compromised by the possibilities of entrapment seldom result in the arrest and indictment of the real, professional traffickers, and those few who do get caught are allowed to plea-bargain for insignificant fines and suspended jail sentences.

Why does the Justice Department allow a defendant who has 10 or 12 felony indictments against him with potential penalties totaling \$100,000 to \$200,000 in fines and 20 to 25 years in prison to plea-bargain for a couple of misdemeanors and a fine of \$10,000 to \$30,000? I think it is because the cases based on "stings" are so inherently weak that the prosecutors are afraid to bring them to actual trial. Instead, they slap on as many stiff indictments as they can possibly justify, in order to scare the defendant into plea-bargaining for a more favorable conviction based on lesser charges. This tactic is perhaps acceptable when the defendant is just some slightly culpable jerk who allowed himself to get suckered by some smooth-talking salesman into doing something wrong, but it results in pathetic and laughable convictions when applied to the professional criminals, who are the ones that really need to be deterred.

There are no hawk-thieves in Saudi Arabia, because in Saudi Arabia convicted thieves get their hands chopped off. While this form of punishment may be too "cruel and unusual" for so civilized and humane a country as the United States to adopt, it does illustrate the point that legal

punishments can be devised that will deter crime.

The appearance created by "Operation Falcon" of widespread illegal activities by American falconers and raptor breeders would not have been possible if FWS agents and state conservation officers had been routinely and consistently enforcing the law. Instead, they essentially suspended enforcement for a period of more than three years in order to let "Operation Falcon" run its course. With the blatant example of their own undercover informer breaking the law with apparent impunity, it is no wonder that some individuals were lulled into a feeling that anything goes, and law enforcement doesn't really care.

Falconers and raptor breeders are wiser, now, as a result of "Operation Falcon"; but none of the hoopla generated in the press about how bad the situation is supposed to be in the falconry community has anything whatsoever to do with the conservation of the Peregrine Falcon. "Operation Falcon" has had the unfortunate result of dividing and alienating organizations and individuals that have traditionally worked together on major issues concerning the conservation of raptors; and there are many serious problems of the day that we should be facing together, rather than spending so much time and effort on the trivial issue of interstate transport and commerce in domestically raised falcons.

"Operation Falcon" has polarized falconers and some conservationists in a most insidious way. I believe that this is precisely the result that the perpetrators of "Operation Falcon" intended, and the biggest scam is the one we have all been caught in by the public furor created through biased newsreleases, rampant disinformation, and the need now to hold Congressional hearings on the subject.

Mr. Chairman, today, in 1985, we have more Peregrine Falcons nesting in the wild in North America and in Europe than we have had in the past 30 years--Britain has more than at any time in this century--and there are more Peregrines in captivity than ever before, thanks to captive propagation. What is our problem, Mr. Chairman? We seem to be doing things right for the Peregrine Falcon. Our problem is not on the nesting cliffs or in the breeding chambers. Our problem lies somewhere else.

S. 725, ENDANGERED SPECIES ACT REAUTHORIZATION

**TESTIMONY
OF
THE NORTH AMERICAN FALCONERS ASSOCIATION
TO THE
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
April 18, 1985**

**by
FRANK M. BOND**

INTRODUCTION

Mr. Chairman and members of the Committee, I am Frank M. Bond, an attorney from Santa Fe, New Mexico. I am here today to represent The North American Falconers Association, which is an international organization of falconers from the United States and Canada. We appreciate the opportunity to present testimony and request that our statement be printed in the proceedings of these hearings.

ENDANGERED SPECIES ACT

The North American Falconers Association appears today in support of S. 725, the reauthorization of the Endangered Species Act ("Act"). 16 U.S.C. 1531 et seq. The Congress, in its wisdom and foresight, saw the need for legislation to protect and promote the welfare of flora and fauna which have been severely diminished because of the actions of man or by natural causes. Furthermore, the Congress has from time to time amended the Act to conform to biological reality and the needs of people working with endangered species.

We, obviously, are interested primarily in birds of prey, particularly the American peregrine falcon (*Falco peregrinus anatum*), which is the subspecies listed as endangered. Because of the difficulty of working with captive-bred peregrine falcons, we, along with other groups and individuals, proposed in 1978 an amendment which exempted these captive bred birds from certain portions of the Act. The 1978 Exemption as passed by Congress amends Section 9(b) to read as follows:

- (b) Species Held in Captivity or Controlled Environment. —
(2)(A) This section shall not apply to —
(i) any raptor legally held in captivity or in a controlled environment on the effective date of the Endangered Species Act Amendments of 1978; or

(ii) any progeny of any raptor described in clause (I); until such time as any such raptor or progeny is intentionally returned to a wild state.

(B) Any person holding any raptor or progeny described in subparagraph (A) must be able to demonstrate that the raptor or progeny does, in fact, qualify under the provisions of this paragraph, and shall maintain and submit to the Secretary, on request, such inventories, documentation, and records as the Secretary may by regulation require as being reasonably appropriate to carry out the purposes of this paragraph. Such requirements shall not unnecessarily duplicate the requirements of other rules and regulations promulgated by the Secretary.

We continue to support strongly the 1978 Exemption, which was only recently implemented completely, because there are benefits from it to conservation efforts, science, and to recreational users of raptors.

THE 1978 RAPTOR EXEMPTION

The record is clear that the Congress also intended to encourage raptor propagation by the Exemption:

In order to encourage breeding of raptors in captivity, the domestic captive-produced progeny of raptors considered to be endangered, but legally taken from the wild after December 28, 1973, shall be considered for legal purposes in a like manner as the progeny of raptors captured before 1973. The Committee believes this will alleviate some of the human pressures on wild raptor populations, will increase genetic diversity in captive populations and will further encourage captive production of raptors for conservation, recreation, scientific and breeding purposes. H.R. Rep. 1804, 95th Cong., 2d Sess.(1978) at 23.

Further, the Conference Committee expected that the Exemption, like other provisions of the Act, would be implemented by appropriate regulation. H.R. Rep. 1804, 95th Cong., 2d Sess.(1978) at 24. The regulations, however, were not to duplicate similar regulations under the Migratory Bird Treaty Act (M.B.T.A.), 16 U.S.C. 703 et seq.

Prior to 1978, the U.S. Fish and Wildlife Service (Service) indicated its intent to draft and propose a set of captive breeding regulations. Although captive breeding of raptors had begun several years earlier, the individual breeder was only licensed by a Special Purpose Permit issued from the Service's Regional Division of Law Enforcement offices. The 1978 Raptor Exemption mandated the promulgation of captive breeding regulations. However, it was not until July 8, 1983 that the Service promulgated its rule to implement the Raptor Exemption. 48 Fed. Reg. 31607 (1983)(codified at 50 C.F.R. §17.7). Simultaneously, the Service incorporated the Raptor Exemption into its regulation

on Federal Falconry Standards (50 C.F.R. 21.29) at §§21.29(e)(2)(iv), (e)(3)(ii), and (e)(3)(v). These sections deal with the standards for the Master Class of falconer.

Also on July 8, 1983, the Service published its final rule on Raptor Propagation Permits, 48 Fed. Reg. 31608 (1983)(codified at 50 C.F.R. §21.30). This rule had undergone extensive hearing and review by many interested parties. Under this rule commercial exchange of raptors was permitted, similar to many other avian species governed by the M.B.T.A. However, raptor propagation became the most tightly regulated of all propagation activities permitted under the M.B.T.A.

The Raptor Propagation rule came nearly five years after Congress passed the 1978 Exemption. We are at a loss to explain why the Service delayed the rule, but it did work a hardship on the orderly implementation of the Raptor Exemption. In fact the rule did not become truly effective until the 1984 breeding season, because the required seamless leg marker was not produced until the Fall of 1983. And even in 1984, it was implemented only in a few states.

In sum, since the passage of the 1978 Raptor Exemption, we have had only the 1984 Spring breeding season under the rule. We believe that this is hardly a test of its effectiveness. As this Subcommittee will recall, the Act was reauthorized in 1980. No one proposed then any modification to the Raptor Exemption.

CONSERVATION, SCIENCE, PROPAGATION, RECREATION

The 1978 Raptor Exemption assists our national effort for conservation, science, propagation and recreation as encouraged in the 1978 House Conference Committee report. Page 2, *supra*. Regulations governing captive propagation, reintroduction for conservation purposes, and falconry are a federal-state, cooperative, closed loop system. Everyone who handles raptors must have permits for any activity within the system. The federal regulations benefit the resource by establishing a uniform national system of procedures. There is very little variation from state to state.

Several people have alleged that commercialism will endanger wild populations of peregrines because of illegal activities. However, there does not appear to be any large scale U.S. black market in falcons. With the massive releases of peregrines for conservation purposes, we see a rapidly expanding wild population undiminished by the small but abhorrent illegal harvest. As more private projects produce falcons at an ever decreasing cost, the supply of birds for recreational purposes should be satisfied completely.

The large institutional breeders, principally The Peregrine Fund, Inc., Ithaca, New York, obtained much of their original and subsequent breeding stock from falconers. These falconers agreed to the release of the progeny

from the loaned stock to the wild for conservation purposes. Much of that breeding stock is still on loan today, so these falconers are making an annual gift to the conservation effort. The Raptor Exemption has made these types of agreements palatable to the lender because he can keep a captive-bred bird occasionally for recreational purposes.

Some private breeders are the sole suppliers of falcons for conservation efforts in some states. Two peregrine falcon release programs, with the intent of repopulating the upper Mississippi River valley in Minnesota and Missouri, obtained falcons exclusively from private breeding projects. Further, peregrines from a private breeder were released in Colorado one year at the same time The Peregrine Fund was working in that state. The Raptor Exemption makes these releases possible. We understand other states are exploring possible cooperative agreements with private projects for a supply of falcons to aid in conservation efforts.

Many private breeding projects have added peregrine falcons to their inventory since the passage of the Exemption. The private projects, therefore, avert further the possibility of catastrophe such as disease, fire, or other destruction at one of the institutional facilities. In the event of a disaster at The Peregrine Fund, for example, the peregrine falcon recovery effort would be set back a decade were it not for the possibility of obtaining birds from these private sources.

We must assume that at some future time The Peregrine Fund and others will cease their large scale effort. Yet there may be a continuing need, albeit smaller, for falcons to be used for introduction purposes in some states. Obviously the private projects can satisfy those needs.

The recovery effort on behalf of peregrine falcons has been the most successful of all endangered species projects. That recovery combined the abatement of organochlorine pesticides with the massive releases of birds to produce such a success. Nevertheless, we must admit that the wild population is fragile. Therefore we believe it would be in our national best interest to have a pool of birds in private projects should a disaster reoccur.

Since more people now are engaged in captive propagation we have increased dramatically our scientific knowledge of the habits of raptors. For example, private breeders have been innovative in discovering new methods for cooperative artificial insemination, raising newly hatched young, and for developing modifications to incubation technology.

Finally, the Raptor Exemption has facilitated the movement of birds in emergency situations in the recovery effort. When the institutional breeders lack space, or when a bird is no longer desirable for propagation, these extra birds can be handed over to falconers or private breeders to complete a useful life. None of this would be possible without the 1978 Raptor Exemption.

OPERATION FALCON

On June 29, 1984, the Division of Law Enforcement of the Service revealed its Operation Falcon, a three year covert "sting" operation. A small percentage of the membership of The North American Falconers Association was searched, charged, or arrested for violations of wildlife laws dealing with birds of prey. Other people were charged who are not members of The North American Falconers Association. The Service's June 29 joint press release, by then Secretary of the Interior William Clark and then U.S. Attorney General William French Smith, claimed large scale black market dealings by falconers of hawks and falcons both in the United States and abroad. During the early morning raids on June 29, over 100 falcons and hawks were seized and approximately 30 people were arrested by Special Agents. Agents reported that none of the birds would ever be returned, but in fact some have and will be as individual owners are afforded their due process rights.

The North American Falconers Association does not condone illegal activities by any of its members. We expect a systematic, even, fair and continuous enforcement of the wildlife laws. Those persons convicted who are members are being systematically removed or suspended from membership by the Board of Directors.

This Subcommittee must not be confused that Operation Falcon was necessary because there were abuses of the 1978 Exemption to the Act; as far as we know, to date there are no charges against any defendant based on this Exemption. As stated, the Exemption had not been implemented. To date, Operation Falcon deals with violations which occurred prior to the implementation of the July 8, 1983 rules, or completely unrelated to those rules.

The allegations in the June 29, 1984 press release by Secretary Clark and Attorney General Smith have resulted in extreme harm to the membership of The North American Falconers Association. We respectfully request that this Subcommittee demand that the Service substantiate every allegation made. We fear that most accusations were exaggerated and, therefore, must be corrected by issuing a public announcement.

The Service also produced an undated and unsigned summary document of its actions entitled, Operation Falcon, which because of the way it presents the data, smears by innuendo many U.S. falconers and raptor propagators. We suggest that the members of this Subcommittee review this document in camera, as we do not wish it to be printed as part of the proceedings, because that would further damage these people. We believe this document was sent to most, if not all, state law enforcement agencies with the apparent intention of prejudicing falconers and raptor propagators in the eyes of state regulators.

The document includes such things as a list of occupations of people purportedly arrested and listed as defendants, but in fact, some were not.

Defendants and suspects are interchanged freely in such a way as to confuse the reader as to how many people have been arrested. There is a listing of the birds involved, but without relation to the individuals charged or violations of law or even the country where the birds were taken. It includes a series of statements out of context and without reference to a particular case, including one from an individual who was acquitted. The final part is a particularly savage and scurrilous attack on The Peregrine Fund, an internationally recognized conservation organization with its headquarters at Cornell University. The Peregrine Fund, with the cooperation of many American falconers, has produced more peregrine falcons for reintroduction purposes than any other organization in the world. There are numerous hearsay allegations against the leadership of The Peregrine Fund when, in fact, no one affiliated with The Peregrine Fund has been charged with any wrongdoing. This Subcommittee should see that action is taken to censure and reprimand the author of this damaging document.

CONCLUSION

The 1978 Exemption to the Act must be considered in the cold, dispassionate reality of the circumstances. Although a very few individuals engaged in wrongful and illegal activities, the overwhelming majority of raptor breeders, falconers and others who work with birds of prey do so with respect for the letter and the spirit of the law.

Without the motivation, knowledge and hard work of American falconers, the captive propagation of peregrine falcons and other species would have been doomed to failure. The falconry community has been, in most cases, the driving force behind the protection and recovery efforts for many species. Many falconers have donated birds, time and money for this important conservation work.

The private breeders will be the repository of falcons for possible future conservation and scientific effort. Further, they represent the buffer against disaster in a large institutional facility. Without the 1978 Raptor Exemption we cannot be assured that these benefits will continue. The North American Falconers Association believes it is important to continue to test the efficacy of the 1978 Exemption. The Exemption makes it possible to transfer birds with some restriction among individuals for conservation, scientific and recreational purposes. The development of the new seamless marker for birds held for commercial purposes will surely stem most of the illegal activity. This new marker replaces the old cable-tie, plastic marker, which the Service itself admitted wears out, breaks, and is not tamper proof. 48 Fed. Reg. 31666 (1983). Further, we are in the process of developing more sophisticated biological methods of identifying individual birds.

Under the captive propagation regulations, raptor breeders and falconers are the most highly regulated and restricted of all the people working under the authority of the Endangered Species Act and the Migratory Bird Treaty.

Act. If the Service will maintain effective, fair and continuous enforcement of the laws, we expect to see a drop in the amount of wrongdoing by those few who might consider violating the law.

Finally, The North American Falconers Association believes strongly that to abandon the Exemption after only a single year of full implementation would be premature in the extreme, especially since it has been implemented only in a few states thus far. The benefits of the Exemption will manifest themselves as the American falconry and raptor propagation community have an opportunity to use it in the coming years.

The North American Falconers Association will continue to seek better communications with the Fish and Wildlife Service, particularly the Law Enforcement Division. We stand ready to cooperate where we can to assist the Service in the wise management of birds of prey and falconry.

Mr. Chairman, The North American Falconers Association strongly urges the passage of S. 725 without any amendment to the 1978 Raptor Exemption.

Thank you.

NORTH AMERICAN RAPTOR BREEDERS' ASSOCIATION, INC.

A Wyoming Non-Profit Corporation

Robert B. Berry, Pres.
Roger Thacker, Vice Pres.
William K. Mallon, Jr., Secy./Treas.

S725, ENDANGERED SPECIES ACT REAUTHORIZATION
TESTIMONY
OF
THE NORTH AMERICAN RAPTOR BREEDERS' ASSOCIATION
TO THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
OF THE
SENATE COMMITTEE ON THE ENVIRONMENT AND PUBLIC WORKS
APRIL 18, 1985
BY
ROBERT B. BERRY

Mr. Chairman and members of the Committee, I am Robert B. Berry, an insurance executive with offices in Sheridan, Wyoming, and King of Prussia, Pennsylvania. I have been a falconer for nearly 40 years and am considered one of the larger falcon breeders in the United States. I am here today as President of the North American Raptor Breeders' Association, a non-profit trade organization established to represent the interests of falcon breeders in North America. We greatly appreciate the opportunity to present testimony and request that our statement be printed in the proceedings of these hearings.

The Endangered Species Act Exemption

The North American Raptor Breeders' Association strongly supports the currently existing raptor "exemption" of 1978 to the Endangered Species Act of 1973, as amended. The ESA, along with the Federal Falconry Regulations of 1976 and the Raptor Propagation Regulations of 1983 provide the flexibility both to satisfy the legitimate public needs and to safeguard wild raptor populations, including *Falco peregrinus anatum*. The regulations implementing the raptor exemption establish uniform standards and procedures for the use of qualifying exempt raptors in the sport of falconry and in captive propagation, including the purchase and sale of domestically produced raptors. This statement will consider all peregrine subspecies in the United States because of the potential implications of the "look alike" clause in the Migratory Bird Treaty Act.

Significance of Private Peregrine Falcon Production

In its statement before the House Subcommittee on Fisheries and Wildlife, Audubon has called for the repeal of the raptor exemption because in its view, the private

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peregrine breeders have not fulfilled their responsibility under the exemption to make a significant contribution to the wild peregrine recovery effort. Nothing could be further from the truth. Quoting from the legislative history of the Amendment, the purposes of the exemption are threefold: to "alleviate some of the human pressures on wild raptor populations *** increase genetic diversity in captive populations and further encourage captive production of raptors for conservation, recreation, scientific and breeding purposes" H. Conf. Rept. No. 95-1084 at 23 (95th Cong. 2nd Sess. 1978).

Table I below provides a clear picture of the approximate magnitude and trends in the numbers of private peregrine propagators in the U. S. and their current and estimated production potential.

TABLE I

Year	Numbers of Propagators	Peregrine Falcons Held for Breeding	Progeny Produced
*1981	20	90	46
1982		---No Data Available---	
**1983	43	129	67
**1984	63	167	84
**1985	85	218	150 Est.
***1989	150-250	384-691	307-512

* Fish and Wildlife Service Final Environmental Assessment - Proposed Rule Making - Raptor Propagation Permits, 50CFR 21.30.

** A conservative estimate based on figures supplied by established propagators.

*** An educated guesstimate which assumes a saturation level in the numbers of persons interested in raptor propagation, that a majority of the 200+ propagators will secure peregrines for breeding once they are readily available, and that as breeding stock reaches sexual maturity and propagators gain practical experience, a rough parity will be achieved between numbers of breeders held and progeny produced.

The raptor exemption of 1978 was implemented by the raptor propagation regulations in August of 1983 and achieved limited operational status in the spring of 1984. Nevertheless, in anticipation of the new regulations, significant numbers of falconers applied for interim special purpose raptor breeding permits and began to acquire breeding stock mainly from Canadian sources where sales were permitted. The number of licensed peregrine breeders increased over 400% during this 4-year period. Twelve states have now fully adopted the sales provisions of the new propagation regulations and several additional states permit purchase but not sale. The new regulations have encouraged established propagators to maximum production and to exchange valuable breeding stock. The increased numbers of captive-bred peregrines, along with improved federal and state laws, are expected to reduce both the need for and the temptation to harvest wild peregrines illegally and to remove the threat of a potential black market, thus fulfilling the

exemption's initial objective to "alleviate some of the human pressure on wild raptor populations."

The second Congressional objective for the exemption, to "increase genetic diversity in captive populations" has been addressed by the North American Peregrine Foundation, Inc., which has funded an International Raptor Registration, maintaining and disseminating computer processed pedigree records similar to the Thoroughbred Racing Association or the American Field's Field Dog Stud Book. Certificates and data retrieval services are furnished to breeders or falconers free of charge to help guarantee the genetic integrity of a viable captive peregrine population (copy of Registration Certificate and sample data retrieval attached.)

The raptor exemption's third and final major goal is to "further encourage the production of raptors for conservation, recreation, scientific and breeding purposes." NARBA figures for 1984 disclose 21 peregrines or their eggs were donated or sold for conservation purposes by private breeders in the U. S., which is 25% of the total U. S. production, plus an additional 12 peregrines from private Canadian sources, or a grand total of 33 birds made available for conservation purposes by private breeders in North America. The Peregrine Fund produced 273 peregrines and released approximately 250 to the wild. Inasmuch as a significant number of the Fund's breeding stock was donated by falconers, private propagators are far behind the Fund in both production and birds earmarked for conservation, thirty and thirteen percent respectively, but considering 1984 as the initial operational year under the exemption with only six states having adopted the sales provisions of the new regulations, private breeders can be proud of their accomplishments. We estimate that over half the private peregrine production in the past two years has gone directly into breeding programs, with half of the balance added after a year or two in falconry. Nearly all domestically produced peregrine falcons are lost to the wild or end up in captive breeding programs, bolstering both the wild and captive populations.

The will of Congress as expressed in the exemption is entirely compatible with the goals of private peregrine breeders and the exemption in its present form is viewed as a valuable conservation aid to protect and perpetuate all peregrine falcons.

Market Prices of Peregrine Falcons

Notwithstanding the prices quoted by the media and protectionist groups of \$10,000 or more for a peregrine falcon, the actual prices of domestically produced peregrines legally sold to U. S. citizens in 1983 and 1984 were modest by comparison and were roughly equivalent to the current cost of a large parrot or macaw. Table II sets forth the range of prices for peregrine falcons paid by U. S. citizens.

TABLE II

<u>Year</u>	<u>Numbers Sold</u>	<u>Low Price</u>	<u>High Price</u>	<u>Median Price</u>
*1983	30	\$1,500	\$3,000	\$2,000
**1984	44	\$ 400	\$3,000	\$2,000

* A single Canadian breeder, prices in Canadian dollars

** Four U. S. breeders sold 26 peregrines; balance supplied by a Canadian breeder

Prior to 1984, a single Canadian breeder maintained a monopoly in peregrine sales in the U. S. marketplace. In 1984, four additional U. S. breeders entered the marketplace. Prices are expected to drop in this decade to between \$500 and \$1,000 for a peregrine, which is the cost of production, excluding capital cost recovery. Many propagators are hobby breeders who are interested only in defraying or recovering operating costs.

Status of Raptor Propagation Regulations

The Federal Raptor Propagation Regulations of 1983, which implement provisions of the ESA Exemption, have been adopted in 12 states (Colorado, Georgia, Idaho, Kentucky, Maryland, Louisiana, Missouri, Nevada, Oregon, Utah, Washington and Wyoming). Several additional states allow purchase but not sales (California, Oklahoma, Minnesota and Montana), and at least one state has authorized sale for conservation purposes (South Dakota).

Benefits of Existing Federal and State Regulations Under the Exemption

Legal sales of domestically produced exempt and non-endangered peregrines clearly benefit the species both in captivity and the wild. Table I illustrates the significant impact of the new propagation regulations on both the numbers of private propagators and peregrine falcons produced. Production is expected to increase dramatically as currently held breeding stock reaches sexual maturity and as new propagators gain practical experience. Given the numbers of variables affecting successful peregrine production, accurate estimates for even the current year are subject to error, hence the range of figures for projected production in the 1989 year in Table I. Nevertheless, even if we assume the worst possible scenario and select our lowest production estimate of 307 birds, the numbers of peregrines being produced by private propagators at the end of this decade will exceed the annual production of the species in the wild East of the Mississippi River prior to the widespread use of DDT in the 1940's.

The currently existing regulations are expected to produce the following benefits to domestic and wild peregrine populations.

1. Benefits to domestic peregrine populations include:

- a. an increase in the numbers of birds held for captive propagation,

- because sales will make additional birds more affordable and because the prohibition against using falconry birds in captive propagation has been repealed; and
- b. an increase in genetic diversity, previously discouraged because there was no incentive to exchange valuable breeding stock (monitored by the North American Peregrine Foundation's International Raptor Registration Program); and
 - c. increasing numbers of propagators will reduce the threat of a catastrophic loss to an individual peregrine subspecies resulting from fire, windstorm, disease or other peril.
2. Benefits to wild peregrine populations include:
- a. a decrease in potential human pressures for scientific, educational and recreational uses because:
 - i) sales will encourage additional domestic production making more domestic birds available;
 - ii) illegal laundering of birds from the wild will decrease when legal sources become available at competitive prices;
 - iii) black market operations will disappear when forced to compete with legitimate operations at competitive prices; and
 - iv) falconry ethics against the taking and sale of wild birds, which may be compromised when other legal avenues are not available, will be promoted by propagators and falconers alike.
 - b. an increase in the numbers of peregrines accidentally lost to the wild from the falconry community, estimated at up to 10% each year. The 2200⁺ U. S. falconers are currently holding a variety of long-winged falcons estimated at 800 to 1,000 birds, including peregrine falcons. As the premier species for classical falconry, a majority of long-wing falconers will choose a peregrine when available, so that unintentional releases will be substantial in future years; and
 - c. a decentralization of captive propagation facilities will prevent the possibility of catastrophic loss resulting from a fire, wind-storm, disease or other peril. In September of 1984, Patuxent Wildlife Research Center lost 20% of the entire captive whooping crane population from Eastern equine encephalomyelitis, a fast-acting viral disease transmitted by mosquitoes. It is unwise to place all of our eggs in one basket; and

- d. the creation of a reservoir population of peregrine subspecies which may be tapped for conservation purposes. The Peregrine Fund will not subsidize the peregrine indefinitely, nor can the Fund be expected to maintain representative gene pools of the various peregrine subspecies once the recovery phase of reintroduction is completed; and
- e. an increase in the numbers of peregrine falcons available to state conservation agencies for reintroduction (the Minnesota Peregrine Project has released 27 peregrines in the past 3 years and expects to release up to 30 birds in 1985. The Missouri Raptor Propagation and Rehabilitation Project and the Illinois Peregrine Project hope to commence peregrine release work in 1985. All of these programs are dependent upon private propagators for their birds.).

Operation Falcon and the Propagation Regulations

The federal "sting" entitled "Operation Falcon" has delayed adoption of the new propagation regulations even though these regulations have not yet been involved in any indictments, or implicated in any affidavits for search or seizure, or in any of the government informant's notes.* In fact, the new regulations were designed to alleviate the need for sting-type operations by providing a legal source of birds to the falconry community not otherwise available. Nevertheless, many state governments have delayed adoption of these regulations because of the continuing nature of Operation Falcon. It is unlikely

* Statements to the contrary by Audubon in its Statement on HR 1027, before the House Subcommittee on Fisheries and Wildlife appear to be based on a mis-understanding of the Service's raptor marking system. Audubon acknowledges two types of marker when, in fact, there are three. The confusion has apparently arisen because the Justice Department in its indictments refers to markers as "non-reusable federal raptor markers", color coded black for wild-taken birds or yellow for captive-bred. Audubon has assumed this yellow non-reusable federal marker was the new yellow seamless marker, when, in fact, it was the old style yellow flexible nylon marker that could easily be manipulated by unscrupulous individuals. Because of this critically important invalid basic premise, many of Audubon's figures as respects the raptor propagation community are incorrect and hence its conclusions are unjustified. The new yellow seamless marker, appropriately characterized by the Service as "tamper proof" came into existence in the spring of 1984 and overlapped the 3 1/2-year covert phase of Operation Falcon by little more than a month. That this new and vastly improved marking system, along with its stringent reporting and record keeping requirements, is involved at all in Operation Falcon, is unlikely.

that the propagation regulations are involved in illegal activities uncovered by Operation Falcon. Only six states (Colorado, Georgia, Louisiana, Oregon, Utah and Wyoming) had implemented the new regulations in time to permit raptor sales in 1984 and Washington implemented use of the new seamless marker. Of even greater significance, only seven propagators sold raptors under the new regulations in 1984, and only four of these individuals sold peregrine falcons. Certainly, these regulations, which evolved over an 8-year period and represented a majority of informed opinion, have not been adequately tested.

In our opinion, sting operations like Operation Falcon are only able to proliferate in an artificially regulated climate which unduly restricts or prohibits free market mechanisms. It is not altogether inappropriate to compare the intolerable legal climate which existed during the days of alcohol prohibition with the dilemma faced by the falconry community when the ESA of 1973 prohibited access to the wild peregrine which has been considered the premier bird for classical falconry for centuries. The raptor exemption of 1978 and the new raptor propagation regulations of 1983 were designed to solve this dilemma, by permitting falconers and propagators access to endangered peregrine falcons held in captivity before November 10, 1978.

Summary

The decline of the peregrine was caused by reproductive failure due to egg breakage induced by ingestion of DDT contaminated prey. The recovery of the peregrine in the U. S. is occurring because of reduced levels of DDT in the environment and the release of captive produced peregrines. We are unable to find any meaningful biological data which even suggests that the decline of the peregrine was caused by human take or disturbance other than destruction of habitat, or that the recovery of the peregrine is being hindered by this same human interference.

The recovery of the peregrine in the U. S. can logically be divided into three phases. In phase I, we learned how to breed peregrines in captivity in meaningful numbers; in phase II, which continues today, we developed techniques to successfully reestablish viable wild populations of peregrines; and in phase III, we will meet the challenge to maintain a healthy wild peregrine population in a changing world. The Peregrine Fund played the major role in phase I and continues in a leadership position in phase II, supported by a variety of private and public groups. Along with subsidizing state recovery programs which the Peregrine Fund is unable to support in phase II, both the falconry community and the breeders will assume key roles to monitor, assist and whenever necessary, subsidize established peregrine populations in phase III of the peregrine recovery.

The reestablishment of the peregrine into habitats from which it was extirpated because of environmental contamination is considered by many as one of the outstanding conservation achievements of this century. It is essential that both

the Raptor Exemption to the Endangered Species Act and the federal falconry regulations remain in tact to guarantee the continued success of this program.

Conclusion

The falconry community has assumed a leadership position in raptor conservation for several decades and has pioneered a variety of programs to help guarantee the survival of all raptorial species, including publicity and public relations to halt raptor persecution, raptor rehabilitation, electrocution abatement, pesticide abatement, captive propagation and reintroduction of threatened and endangered species, to mention a few. Falconers are directly responsible for the strict federal falconry regulations designed to discourage all but the truly dedicated sportsmen. Falconers championed the raptor exemption to the ESA to facilitate reintroduction of the peregrine in the U. S. and to guarantee the existence of a viable captive population should another environmental catastrophe threaten the chemically sensitive wild population. Falconers supported the concept of legal sales of domestically produced raptors as a means to encourage captive propagation within the framework of existing regulations.

Our existing raptor laws are not perfect and will continue to evolve over time as new data is gathered. Nevertheless, we have a firm base upon which to develop model laws where the legitimate rights of our citizens complement biological parameters insuring the survival of wild ecosystems. The falconry community has demonstrated its dedication, commitment and competence to justify its stewardship role as a major benefactor to our raptor resource. We respectfully request the continued support of the Congress to help us fulfill this obligation.

On behalf of the North American Raptor Breeders' Association, I would like to thank the Chairman and members of the Subcommittee for your kind attention and consideration of our views.

STATEMENT OF

THE NATIONAL AUDUBON SOCIETY

**ON THE REAUTHORIZATION OF THE
ENDANGERED SPECIES ACT**

S. 725

**BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
OF THE
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS**

PRESENTED BY JAMES P. LEAPE

April 18, 1985

I am James P. Leape, Counsel for Wildlife Programs of the National Audubon Society. I appear today on behalf of the National Audubon Society to urge the Committee to reauthorize a strong Endangered Species Act.

The National Audubon Society was founded at the beginning of this century to work for the protection of endangered species of plants and animals, and, in particular, endangered species of birds. Today Audubon represents over half a million Americans dedicated to that effort.

My testimony today will focus on one specific issue that is of particular concern to Audubon and its members -- the protection of the peregrine falcon. Before discussing the threats that now face the peregrine, and the measures that we believe are necessary to protect it, let me briefly summarize our other concerns about the effectiveness of the Act.

We believe that the current endangered species program, first created by Congress in 1973, is basically sound, and we do not now ask the Committee to consider any fundamental changes. Nonetheless, in many important respects, the Act is failing to achieve its purposes. Many of these failings are set forth in the thorough and incisive testimony of Michael Bean, which the Committee heard earlier this week. We endorse that testimony, and urge the Committee to adopt the modest measures that Mr. Bean proposes as necessary to address the problems he has identified.

First, we urge the Committee to authorize increased funds for implementation of the Act so that: (1) the Departments of the Interior and Commerce can accelerate their listing decisions, to more quickly extend the protections of the Act to the more than one thousand "candidate" species known

to be in danger of extinction; (2) the Departments of the Interior, Commerce, and Agriculture can carry out the many recovery plans that have been prepared but never implemented; (3) the states can build strong endangered species programs to supplement the federal effort; and (4) the United States can assist the efforts of developing countries to protect their rapidly dwindling biological diversity.

Second, we urge the Committee to provide some protection for species identified as candidates for listing, so that federal actions do not continue to extinguish species as they are being considered for protection. Third, we urge the Committee to provide stronger protection for endangered plants, by forbidding the malicious destruction of endangered plants and the taking of specimens from private lands without the landowner's formal consent. Finally, we urge the Committee to reject the proposals of western water developers to exempt their projects from the Act's protections; we believe that the Act provides appropriate mechanisms for resolution of conflicts between the protection of endangered species and western water rights. We urge the Committee to demand vigorous enforcement of these provisions.

THE RAPTOR EXEMPTION

I am testifying today principally to ask the Committee to extend the full protections of the Endangered Species Act to the endangered peregrine falcon. Over the past decade and a half, the federal government has spent more than \$14 million on programs to restore peregrine and other raptor populations. Yet, since 1978, the peregrine falcon (the only endangered

raptor used for falconry) has been subject to a special exemption (ESA Section 9(b)(2)). That exemption, known as "the Raptor Exemption," provides that the prohibitions of ESA Section 9(a)(1) do not apply to peregrines that were held in captivity on November 10, 1978, or are the progeny of any such birds.

The Raptor Exemption was adopted in 1978, on assurances from the North American Falconers Association (NAFA) that the Exemption would encourage private efforts to breed peregrine falcons, by eliminating the permit requirements and other "red tape" imposed by the Endangered Species Act, and by allowing sale of the peregrines produced. Such measures, they asserted, would enhance the recovery of peregrine populations in the wild. Today, however, it is clear that the Exemption has not yielded significant benefits to the recovery effort, and, in fact poses a serious threat to wild populations.

A. The Raptor Exemption Does Not Benefit Wild Peregrine Populations.

The Raptor Exemption has now been in effect for seven years. Under its umbrella, there are now 51 falconers trying to breed peregrine falcons. Yet, although these private breeders hold many peregrines, they are not producing any significant number for use in the restoration of wild populations. The effort to restore wild peregrine populations has been left almost entirely to the non-profit Peregrine Fund.

Every person attempting to breed peregrine falcons or other raptors must obtain a permit from the U.S. Fish and Wildlife Service and must each year file a report with the Service describing his or her activities under the permit. Through the Freedom of Information Act, Audubon has obtained copies

of the reports filed with the Fish and Wildlife Service for 1984. These reports reveal that, although there are many falconers trying to breed peregrines, few of them are successful and few of the successful contribute any peregrines to wild populations.

According to the reports filed with the Fish and Wildlife Service, there were 51 breeders (not including the Peregrine Fund) holding peregrine falcons in 1984; they held a total of 226 peregrines. Six of these breeders, including two of the largest, are now under indictment, or have already been convicted, as a result of Operation Falcon. The remaining 45 breeders produced a total of 65 peregrine chicks in 1984; 52 of these peregrines were sold or given to other falconers, or were kept; 13 were released to the wild.* Of these 45 breeders, only four produced peregrines for release to the wild.

The Peregrine Fund presents a striking contrast. In 1984, the three branches of the Peregrine Fund (in Ithaca, New York; Boise, Idaho; and Santa Cruz, California), produced 270 peregrine falcons from captive stock; at least 254 of these birds were released to the wild.**

*The 1984 report for one large breeder, Col. Richard A. Graham, which indicates that he produced 8 birds, does not indicate the species of the birds produced. We therefore rely here on his production records for 1983, which indicate that he produced 5 birds, all hybrids.

**The Peregrine Fund raises falcons both from eggs laid by its captive stock and from eggs taken (under special permit) from wild nests. Although the PF newsletter and reports indicate that the Eastern and Pacific programs released 152 peregrines produced by captive stock, it is unclear how many of the 120 peregrines released by the Rocky Mountain program were captive-bred. As 18 wild peregrines were raised, the number of captive-bred peregrines released in the Rocky Mountain program could be as low as 102. The total number of captive-bred peregrines released into the wild by the Fund is thus somewhere between 254 and 272. We have used the more conservative figure.

In short, the Peregrine Fund dominates the effort to restore peregrine populations in the wild, providing over 95 percent of the peregrines released to the wild. Six years after the Raptor Exemption went into effect, only 13 of the 267 peregrines released to the wild were produced by the private breeders it was supposed to encourage.

Thus, the Raptor Exemption does not make any significant contribution to the restoration of wild peregrine populations. Moreover, as explained below, it now poses a serious threat to those populations.

B. Take of Peregrines from the Wild.

Because of the Raptor Exemption, private peregrine breeders face a powerful and often irresistible temptation to use their breeding license as cover for illegal trade in wild peregrines. Operation Falcon has provided new insight into this black market.

Through the extraordinary undercover work of the U.S. Fish and Wildlife Service, and a unique opportunity to penetrate the market through an established falconer, Operation Falcon has uncovered a burgeoning illegal interstate and international commerce in peregrine falcons, gyrfalcons, and other raptors. The investigation continues, but already it has led to the indictment of over 70 falconers here and in Canada, under virtually all of the federal laws protecting birds of prey. It has also shed considerable light on criminal activity that ordinarily defies enforcement -- the theft of birds from the wild.

The information already available from Operation Falcon reveals the threat now faced by wild peregrine populations. The problem can be simply

stated. To allow commerce in "pre-1978" and captive-bred peregrines, the Service must depend upon a banding system to identify birds qualifying for the exemption. Operation Falcon clearly demonstrates that such a banding system can be and has been easily defeated by substantial numbers of falconers and others who have used the bands to disguise as captive-bred (and thus exempt), birds that were illegally taken from the wild.

The Fish and Wildlife Service uses three types of leg bands to identify birds lawfully held under the Raptor Exemption. Peregrines held in captivity in 1978 are marked with adjustable black bands. The captive-bred progeny of those birds are marked with an adjustable yellow band or, to be eligible for sale, with a seamless, nonreusable, numbered band that is slipped on the falcon's leg in the first two weeks of life. Operation Falcon revealed that all of these bands can be used fraudulently to cover peregrines taken from the wild for use in falconry or in interstate commerce under the Raptor Exemption.

Most often, falconers have used private breeding facilities to "launder" birds taken from the wild as eggs or eyasses (chicks) less than two weeks old, by marking those birds with the bands issued for identification of birds produced by the breeding facility. Although we have no doubt that most breeders are honest, Operation Falcon has established that a substantial number are not -- so far, 16 raptor breeders in the United States have been indicted in Operation Falcon, including 6 breeders holding peregrines. [Of the 16 indicted, 13 have pled guilty, 3 await trial.] Just last month, the government of Canada filed falcon trafficking charges against the largest private peregrine breeder in the United States, a falconer holding 20 peregrines.

We do not yet know the full impact of the illegal trade on the endangered peregrine falcon, but we do know that it is substantial. To date, 16 falconers have been indicted in the United States for illegal trafficking in wild peregrines. Of these 16, at least 12 were alleged to have fraudulently marked the birds with bands issued for captive or captive-bred peregrines. Twelve of the 16 have been convicted, 1 has been acquitted, and 3 await prosecution. The Operation Falcon documents already made public reveal evidence of more than 60 peregrines taken from the wild, and government officials have repeatedly stated that trade revealed so far is but the tip of the iceberg. Additional evidence will be released as the investigation continues and, even then, it is likely the much if not most of the illegal take will have escaped detection.

Nonetheless, from the evidence now available it is clear that there are a substantial number of people, falconers and others, who are willing and able to take wild peregrines for sale or for their own recreational use, and who are taking wild peregrines in significant numbers. It is also clear that the safeguards available to protect wild populations cannot solve the problem, and that so long as the law allows the sale of any peregrines, the problem will get worse. The experience of Canada is telling.

C. The Sale of Peregrines in Canada.

Canada has allowed the sale of captive-bred peregrines and other raptors for many years. In the past several months, Operation Falcon has revealed that the Canadian system has spawned a thriving international black

market in wild falcons. Cooperating with the U.S. Fish and Wildlife Service, the government of Canada has already indicted over 20 people for trafficking raptors in Canada, and between Canada and the United States, Great Britain, West Germany, Japan, and Saudi Arabia. Two examples illustrate the magnitude of the problem:

For several years, two falconers in Cambridge, Ontario, operated a breeding project under the name Birds of Prey International. These two falconers, who have already pled guilty to falcon trafficking charges, conducted a large and lucrative international trade in wild raptors, especially gyrfalcons and peregrines. In 1983 alone, they took 24 nestling gyrfalcons and 15 nestling anatum peregrines from the wild. The birds were "laundered" through several breeding projects around Canada, fraudulently banded with Canadian raptor bands, and then sold as "captive-bred." In a single year, this illicit trade grossed over \$750,000 in falcon sales, principally to buyers in Saudi Arabia.

The owners of a second breeding operation, the largest game farm in the Yukon Territories, were indicted in February. The indictment alleges that this breeding operation, which had housed the peregrine breeding project of the Yukon Territorial Government since 1980, never produced a single peregrine in captivity. During that period, however, the project "laundered" over 20 peregrine falcons (and 30 gyrfalcons) illegally taken from the wild, for sale and export as "captive-bred" birds. The Canadian government estimates that this one breeding facility grossed over \$700,000 in sales in 1982 and 1983.

The findings of the Canadian government's investigation reveal the vulnerabilities and likely consequences of continued peregrine sales in the United States. Announcing the latest round of indictments, the government explained the workings of the falcon trade:

"The modus operandi in the current charges is generally as follows. A large loose-knit group of falconers and their associates have been involved in taking birds of prey from the wild; particularly in the Yukon Territory, Northwest Territories, British Columbia, Quebec, and the western United States. Some of these birds have been taken legally under authorized harvests, but many have been captured illegally, Usually these birds have been taken from nests as nestlings ('eyasses') or eggs.

'The illegally captured birds have generally been removed to so-called breeding facilities where they have been placed with adult birds and represented as the progeny of those adults. Wildlife officials have then been summoned to band the young birds. Finally, the operators of the breeding facilities have applied for export permits under the Export and Import Permits Act, representing to Canadian Wildlife Service representatives that the birds were captive-bred, thereby being eligible for exemption from CITES."

"Crown Submissions of Circumstances of Offences" (pp. 3-4) (emphasis added).

It is already clear from Operation Falcon that falconers in the United States, in coordination with Canadians and on their own, have begun to

develop an active illegal peregrine trade. So long as we continue to allow the trade of captive bred peregrines, there is every reason to believe we will repeat the Canadian experience, and lose increasing numbers of our wild peregrines to the international black market.

D. Repeal of the Raptor Exemption.

We therefore urge the Congress to repeal the operative language of the Raptor Exemption. More specifically, we urge the Congress to declare that all peregrine falcons, whether captive or wild, are protected by the Section 9(a)(1) of the Act. In effect, this measure would ban peregrine falcons from interstate and international commerce. This is a modest change, but we are convinced that it will not impede the recovery effort and that it will provide needed protection to the peregrine.

1. The Basis for our Proposal.

As explained above, peregrine breeders have been exempt from the permit requirements and other restrictions of the Endangered Species Act since 1978, yet the proliferation of private peregrine breeding operations under this exemption has not yielded any significant benefit to the recovery effort -- altogether these private breeders contributed less than 5 percent of the peregrines released to the wild. Some may argue that this dismal record can be blamed on Fish and Wildlife Service's delay in removing the last barrier to sale of captive-bred raptors, regulations under the Migratory Bird Treaty Act. In response, we offer two observations. First, none of the breeders who

sold peregrines last year provided any peregrines for release to the wild. The prospect of sale thus does not seem to encourage breeders to contribute to the recovery effort -- indeed, when peregrines can be sold to falconers for \$2,000 to \$10,000, it becomes very expensive for a breeder to forgo that profit by releasing his birds to the wild. Second, most breeders now trying to produce peregrines also breed raptors of other species. Those species can be sold under current regulations, and could still be sold if the Raptor Exemption is repealed. It is thus possible for breeders to recover the costs of their operations, without selling peregrines.

Banning all peregrines from interstate commerce is necessary to protect peregrines in the wild. For decades, Congress has recognized that prohibition of interstate commerce in wildlife is essential to effective protection of wild populations. Like every other major federal wildlife statute, the Endangered Species Act is based on this principle. The principle applies with special force to protection of the peregrine falcon.

As explained above, the opportunity to trade and sell peregrine falcons offers substantial potential profit to the unscrupulous. While some have claimed that captive breeding operations would satisfy the demand for peregrines, Operation Falcon has proved them wrong. Whether it is because many falconers prefer wild birds, or because captive breeding is just too difficult, there is a substantial market for peregrines and other raptors taken from the wild.

So long as the Raptor Exemption allows the sale of captive-bred peregrines, it will be difficult if not impossible to end commerce in wild peregrines. As Operation Falcon revealed, the leg bands used to identify

captive-bred birds can too easily be used to provide a nearly perfect shield for the trade of wild birds. So long as commerce in any peregrines is legal, such devices will continue to defeat law enforcement efforts.

Simply put, it is one thing for law enforcement officers to prove that a bird was sold in interstate commerce, it is quite another to establish that the bird was illegally taken and fraudulently banded. The North American Falconers Association has complained bitterly about some of the undercover techniques used in Operation Falcon. But so long as enforcement of the Act requires the Fish and Wildlife Service to prove not only that a person sold a peregrine, but also that the peregrine was taken from the wild, those techniques, difficult and distasteful as they may be, will be the only recourse for effective law enforcement.

2. The Effect of our Proposal on Falconry.

By this amendment we mean to provide that falconers can continue to possess peregrine falcons now legally held, and their progeny, but that those birds would be subject to all the protections afforded by ESA Sec. 9(a)(1). The purpose of this action is to end international and commercial interstate trade in peregrines, and we believe that to be its sole effect. Nonetheless, some falconers have expressed concern that application of Section 9(a)(1) to peregrine falcons may have other consequences. We address these in turn.

a. Use of Peregrines in Falconry.

Some have suggested that Section 9(a)(1) would effectively end the use of peregrines in falconry. If this concern appears to be valid, we will

support language, either in the bill or in the Committee report, to make clear that use of peregrines in falconry may continue. We are convinced, however, that the concern is unfounded.

Sec. 9(a)(1) does not forbid the recreational use of peregrines or other endangered species that are legally possessed. And its ban on possession applies only to endangered species that have been illegally taken. Peregrines legally held under the Raptor Exemption, and their captive-bred progeny, have not been illegally taken. Possession of these birds, and use of them in falconry, is thus allowed by Sec. 9(a)(1).

b. Taking Peregrines to Meets.

Some falconers have also expressed concern that Section 9(a)(1) would prohibit them from taking their peregrines across state lines to participate in falconry meets, and similar convocations. Again, if this concern proves to be legitimate, we will support bill or report language to resolve it. Again, however, we believe it to be unfounded.

Section 9(a)(1) contains two limitations on the transport of endangered species. First, it forbids any transport of specimens illegally taken. Sec. 9(a)(1)(D). For the reasons explained above, this limitation would not apply to peregrines legally held. Second it forbids transport "in interstate or foreign commerce . . . in the course of a commercial activity." Sec. 9(a)(1)(E). By its explicit terms, this limitation applies only to "commercial activity," defined as the "activities of industry and trade." So long as the peregrine is not taken to a meet to be sold (or bartered), its transport across state lines would hardly seem to be "industry and trade." Section 9(a)(1) thus would pose no bar.

c. Release of Peregrines to the Wild.

Some peregrine breeders have suggested that application of Section 9(a)(1) to peregrines may hamper their efforts to release captive-bred peregrines to the wild, by requiring them to obtain permits for each bird released. Federal permits are already required for such releases, however. 50 C.F.R. §21.30(d)(9). This requirement should not become more onerous if Section 9(a)(1) is applied to peregrines. Indeed, FWS regulations under the Endangered Species Act make clear that a breeder may, through a single application, obtain permission for all releases planned for a given year. 50 C.F.R. §17.22.

To the extent that states impose additional requirements, that would seem to be appropriately their affair. We note, however, that most if not all states are eager to restore their wild peregrine populations, and thus unlikely unduly to impede release of peregrines to the wild.

d. Trading of Peregrines to Diversify Breeding Stock.

Finally, some peregrine breeders have expressed concern that application of Section 9(a)(1) may prevent them from trading peregrines with other breeders and falconers, to ensure a healthy genetic stock. So long as no consideration is paid, the donation or loan of a (legally held) peregrine to the Peregrine Fund or any other reputable breeder should not conflict with any part of Section 9(a)(1), because such a donation would not be "commercial activity." Section 9(a)(1)(E). The sale (or barter) of peregrines for such purposes would be barred by Section 9(a)(1) -- after all, it is such transactions that are the root of the problem we are trying to address. Nonetheless, any breeder who can demonstrate a need for new peregrine breeding

stock to enhance his efforts to restore wild populations, can obtain a permit from FWS to allow such a transaction. 50 C.F.R. §17.22.

In closing, let me stress the limited nature of the measure we ask -- we ask only that Congress extend to the peregrine falcon the same protection afforded all other endangered species, protection against commercial trade. Let me reiterate that in requesting this protection we do not seek to end the use of these birds in falconry. Audubon does not condemn or oppose falconry. Most falconers are honest, and share our commitment to the protection of wild raptors. Indeed, over the years, many falconers have contributed to the effort to rescue the peregrine falcon. We hope that these falconers will join us in continuing that effort, by asking that Congress restore to the peregrine falcon the full protections of the Act, and prohibit all interstate commerce in these endangered birds.

S.O.S.

April 12, 1985

United States Senate
Subcommittee on Environmental Pollution
Committee of Environment and Public Works

Honorable John H. Chafee, Chairman, and Members of the Committee:

Enclosed are the comments and recommendations submitted by Save Our Shellfish (SOS) for the April 17-18, 1985 hearing on the reauthorization of the Endangered Species Act of 1973.

We thank you for the opportunity to present our views, and we greatly appreciate your consideration.

Sincerely,



Richard C. Williams
Executive Secretary

RCW:

Enclosure

SAVE OUR SHELLFISH

219 E STEARNS WHARF, SANTA BARBARA, CA 93101 (805) 963-8485

INTRODUCTION

Save Our Shellfish (SOS) was formed in 1979. Our comments reflect the concerns of a large number of interested and affected groups with a combined constituency in the hundreds of thousands. A few directly affected are:

Morro Bay Fishermen's Association - 60 boats
California Gillnetters' Association - 120 boats
Commercial Abalone Divers - 179 permittees in 1984
California Abalone Association (CAA), representing the abalone fishery
Commercial Sea Urchin Divers - 229 boats in 1983
California Urchin Divers Association (CUDA), representing the sea urchin fishery
Commercial Lobster Fishermen - 410 permits in 1984
Greater Los Angeles Council of Divers (GLACD) - approximately 300,000 active sport divers in Southern California
Central California Sportsmans Association

SOS also represents seafood processors; wholesalers and retailers; seafood restaurant owners and their customers; charter boat and dive shop owners and their employees; boat builders; marine and diving equipment suppliers; shellfish mariculture operators; and among others, all those who support facilities that are directly and/or unknowingly affected by the lack of proper resource management.

Also included are resolutions from:

City of Morro Bay
Santa Barbara County Board of Supervisors
San Luis Obispo County Fish & Game Committee

SUMMARY OF CONCERNS

The sea otter-shellfishery conflict has dragged on for over 25 years in California, and has surfaced more than a few times in Congressional hearings. The basic problem was that sea otters preclude human use of shellfish. Biologists now agree that sea otters eliminate shellfisheries. The sea otter range in California extends about 219 miles along the central coast. There is no commercial and virtually no sport shellfish harvest where otters are established. Some of this area has been precluded, particularly for abalone, for over a decade. This area once produced half or more of the statewide commercial abalone catch. Now shellfish resources are being impacted by expansion of "migrant front" otters outside the established range.

We all agree that sea otters need and deserve protection. But as the law is now interpreted, sea otters are to a large extent precluding multiple use of nearshore resources. There is the loss of shellfish: abalone, sea urchins, crabs, clams, mussels, and as sea otters move south, lobsters--over 40 species in all. The gillnet closure eliminates local halibut, angel shark, white sea bass fisheries, and others. Furthermore, as SB 89 is worded, it sets a precedent to close more areas and fisheries as sea otters expand their range. And it sets precedent for other protected animals incidentally caught in other fishing gear, potentially eliminating still more fisheries.

In 1980 the Marine Mammal Commission recommended that FWS recognize the need for zonal management, and that implementation would require designation of otter and non-otter zones. Implementation would also require effective containment methods for zonal management to succeed. Although FWS now recognizes zonal management on paper as a possible eventuality, we still have no designated zones or proven containment methods. Nonetheless, FWS is pressing for translocation to San Nicolas Island, which would eliminate a valuable--indeed, critical--shellfishing area in the Channel Islands and conceivably jeopardize all Southern California shellfishing and gillnetting.

The FWS research staff has repeatedly overlooked research contrary to its own beliefs. FWS biologists have not utilized the best scientific information in choosing San Nicolas Island as the preferred translocation site.

- * San Nicolas has the smallest carrying capacity and largest oil spill risk of any site considered (Dobbin Mapping Study).
- * Reasonable estimates place carrying capacity for San Nicolas Island at 300-400 animals. The Preliminary Draft EIS for translocation acknowledges that carrying capacity might be reached within eight years. (FWS plans to translocate 150-250 otters within five years, after which time the habitat admittedly will be fully utilized.) There is no discussion in the PDEIS of dispersal, although otters at carrying capacity are known to disperse. How will these animals be contained? Who will guarantee funding in perpetuity for containment?

The issue has grown even wider, however. Under threat of lawsuit from sea otter protectionists, the California Attorney General issued an informal opinion that current protective laws forbid the incidental "take" of even one otter. In response to the "no acceptable accidental mortality" finding, Department of Fish and Game Director Parnell closed central coast waters inside 15 fathoms to gillnets over three-inch mesh. In effect since January 25, 1985, the closure will be extended under authority of Senate Bill 89, now moving through Legislature.

CDF&G has estimated that 80 otters a year may be drowned accidentally in gillnet fishing, based on observations of approximately 10 percent of net pulls, where 22 otters were observed drowned over a two-year period. Many of these animals were subdominant migrant front males that, according to biologists, seasonally are pushed to the periphery of the established range in part due to food scarcity. Gillnet fishermen have recovered fish with the skins peeled off, a technique used by Alaskan otters that forage on fish, according to U.S. Fish and Wildlife Service scientist Karl Kenyon. It may be that California otters caught in gillnets were actively working the nets, looking for food. As one fisherman suggests, banning gillnets may cause a net increase in otter mortality because inshore gillnets also catch white sharks. White sharks are known to be responsible for at least 10 percent of recovered dead sea otters. According

to John McCosker, director of Steinhart Aquarium and noted shark authority, the white shark population is increasing, paralleling increases in protected marine mammals. McCosker believes that some "management" plan will soon be needed to control population growth of both marine mammals and sharks (SF Chronicle, 18 February 1985).

Scientific opinion diverges widely regarding the health and viability of the current otter herd and the otter's effect on the ecosystem. There is no substantive evidence to show that the population has declined, although it has not apparently grown in the last several years. With the elimination of net mortality, biologists predict that the herd will "bloom" in number again, recolonizing the coast at 10-15 miles per year.

* FWS researchers theorize that because otters decimate kelp-grazing sea urchins, otters enhance *Macrocystis* kelp (the commercially harvested species), and increased kelp fosters an increase in finfish--positive economic benefits that were included in the PDEIS.

* Much available scientific testimony confirms the widely variable patterns in kelp communities. Generally, Southern California has a different system than central California, which is different from Alaska (where much FWS research was compiled). Many competent independent scientists point out that myriad complex, interacting forces influence kelp abundance: storms, pollution, El Ninos for instance. The point is, FWS attributes economic benefits to sea otters that cannot in reality be measured.

* Biologists generally equate more kelp with more of some fish species, but not necessarily those valued by fishermen. Nobody can say if--or how many--economically important fish might be gained by increases in kelp canopy that possibly, in some cases, could be attributable to--among other influences--sea otter foraging. On the other hand, along with documented losses of shellfish approaching 90 percent of the biomass measured in transects, desirable fish like sheepshead and cabezon apparently decrease in areas where otters forage, because otters remove the invertebrates that these species depend on.

* Furthermore, Southern California has effective alternate predators on sea urchins: sheephead, spiny lobster and sea urchin divers who harvested over 60 million pounds of urchins in 1981-83 alone, with a multiplied value of \$47.8 million--an increasingly important U.S. export fishery. This fishery, as with all shellfisheries, will be precluded where otters establish.

We're looking for reasonable solutions whereby sea otters can be protected and people can still exist on the ocean. We agree with the concept of translocation as a management tool, but we need guarantees protecting multiple use of resources. This can be accomplished through zonal management. However, realization of zonal management has been thwarted to date by many inaccuracies and discrepancies in the FWS approach:

1] Although management is possible under an experimental population designation of the ESA, management is impossible under the MMPA at present, because the California sea otters' "threatened" listing in the ESA automatically classes the herd as "depleted" under the MMPA, which allows no taking except for research purposes. Thus, without MMPA amendment or other special provision, FWS has no authority to translocate otters and contain them, as promised.

The FWS attempt to translocate under a research permit, thus avoid amending the MMPA, is not justified and not a valid research exercise, we believe, although it is one reason FWS gives for a San Nicolas Island translocation, since FWS has spent some five years and half a million dollars on baseline research at this island. According to a 1981 GAO Report to Congress:

"The State and Marine Mammal Commission told (GAO) they had not been consulted concerning the offshore ecological studies currently being conducted by FWS near San Nicolas Island in California. MMC had advised FWS in August 1979 that priority attention should be directed to compiling and combining available relevant data and studies on the sea otter before initiating any work on future translocation sites. Both the State and MMC expressed concern that FWS has, in effect, determined already that sea otters will be transplanted to the San Nicolas Island area."

FWS answered that other areas would also be studied, but this has never happened, and FWS biologists are just now compiling the sea otter studies needed, another reason FWS gives for translocation to San Nicolas--to watch the population and study its characteristics.

The purpose of translocation, as MMC and even the FWS Recovery Plan have stated, is to alleviate the oil spill threat, recover and delist the population and allow zonal management. FWS overlooks excellent baseline research at Diablo Canyon, which measures changes in the environment before and after otter foraging, eliminating the need for translocation to research these affects. Furthermore, translocation under a research permit allows FWS no authority to contain/manage sea otters under reasonable interpretation of the MMPA, as it is now written.

2] The PDEIS appears to bias the reader to the urgent need for translocation, yet fails to discuss elemental recovery/zonal management issues.

* The PDEIS states that the otter range has not grown measurably in a decade. But according to the FWS Recovery Plan itself, the range has increased almost 40 miles since 1977, an increase greater than the historic average.

* There is no discussion of the management framework within the scope of the entire species. Some 200,000 sea otters thrive in Alaska, considered by the majority of the scientific community to be the same subspecies as California otters. Preliminary genetic studies have found no fixed differences between Alaska and California specimens (Lidicker and McCollum, 1981).

Ralls et al (1983) calculated that the current California otter population should theoretically retain...minimum of 77% of the genetic diversity characteristic of the original herd.

* Given the marked similarities between Alaskan and California otters, the PDEIS still recognizes the California herd as a subpopulation, and the Federal Register identifies it as a separate subspecies. In addition, the PDEIS declines to discuss:

* The specific definition of Optimum Sustainable Population;

- * How many translocations are necessary to delist, to zonally manage;
- * How containment/management will be accomplished (FWS assumes personnel will be able to retrieve individual animals one by one; there is no consideration that otters could disperse in groups);
- * Who will fund management and for how long? Who will guarantee funding for containment in perpetuity?

What is the bottom line of translocation? What will it achieve? Who, ultimately, will it affect? What will it cost? These are questions currently without answers.

* There is no discussion of dispersal and its impact on resources, or its impact on open-ocean mariculture projects. Nor is there adequate assessment of potential containment methods and their costs. According to the Dobbin mapping study, if otters disperse to other Channel Islands, "...conflicts arising from the selection of San Nicolas would be greater (in economic terms) than conflicts arising from dispersal from other zones."

Dispersal is a characteristic of otters at carrying capacity. Otters recolonized Alaska--from seven widely scattered remnant groups to approximately 200,000 animals--by dispersal across broad expanses of open ocean. Dispersal was also believed to be responsible for population declines immediately following prior translocations.

* At present, containment is not legal, technically possible, or feasible without an amendment to allow last-resort culling.

The economics of containment and provisions for acceptable "taking" are not addressed in the PDEIS. Due to the probability of dispersal, the economic impact of translocation **must** consider the entire Southern California area, not just San Nicolas Island.

The multiplied value of fisheries that ultimately could be affected by a Southern California translocation average \$40 million a year.

* The largest suitable site identified in the Dobbin report was eliminated from the PDEIS. The Northern Washington site has an estimated carrying capacity of 1,300-2,500 sea otters.

Oil risk on the outer coast is "very low," and shellfishing

conflicts also are very low in the translocation zone. FWS eliminated the site because of the presence of a small herd of Alaskan otters, translocated to the "southern" otter range in the 1960's. FWS argues that introducing California otters might hybridize their potentially unique gene pool, and hybrids aren't protected under the ESA.

Historically, otters ranged continuously along the Eastern Pacific rim. Many scientists state that interbreeding would simply restore historic continuity of the artificially disrupted gene pool.

FWS declined to expand genetic research, when pressed on this issue, claiming that genetic determination was not germane to the recovery of the southern sea otter. We believe it is when the largest and best site is precluded from consideration for translocation on the basis of politics.

RECOMMENDATIONS

- 1] Amend ESA Section 10(j) to require that no experimental population of sea otters be established without agreement by all affected interests.
All impacts of such a translocation must be weighed fairly:
 - * Cumulative economic impacts on the entire region, not only the translocation site proper;
 - * Cumulative risks over the entire region. Sea otter dispersal is inevitable following translocation, sooner or later. Dispersal will subject otters to unacceptably high risk following translocation to any site in Southern California. The area south of Point Conception encompasses the most vigorous oil development on the West Coast, along with heavy tanker traffic and numerous oil and gas seeps. The Dobbin report eliminated several areas in Southern California because of unacceptable risk, including the northern Channel Islands. How would dispersal impact otters? How would dispersal impact oil recovery and fisheries?
- 2] Nonessential status under Section 10(j) should be required and guaranteed in perpetuity prior to any translocation.
- 3] Amend the ESA to supersede the MMPA in the case of sea otters, or in some way grant the flexibility to implement immediate zonal management for the central coast herd.
 - * Designate all waters south of a specified point on the coast as a "Non-Otter Zone," including all Channel Islands. An amendment would be necessary to legalize the removal of otters from Channel Islands National Park, should they emigrate there.
 - * We suggest that an acceptable incidental take be legalized within the Non-Otter Zone.
 - * While containing the southward movement of otters on the central coast (to protect animals from oil recovery activities and, at the same time, establish a guaranteed fishing zone for shellfishermen, gillnetters

and mariculture operators), encourage sea otter expansion northward to the mouth of San Francisco Bay. Legalizing zonal management protects sea otters, protects fisheries, and allows the State to fulfill its mandate to preserve a balance of ALL marine resources.

- 4] Stipulate that one translocation will alleviate the perceived oil spill threat to the parent population and will be sufficient to delist otters from the ESA.
- 5] We urge that the Northern Washington translocation site alternative be included in the DEIS and be reconsidered as a primary translocation site. Northern Washington, of all sites studied in Dobbins, has the largest carrying capacity, a low fishing conflict and low oil risk on the outer coast. If the presence of Alaskan otters constitutes an insurmountable legal problem, given FWS arguments that translocation be classed a research project we suggest that research be performed on the Alaskan herd in Northern Washington, during which experiment the animals be relocated in the "northern" otter range.
- 6] We also suggest that San Francisco Bay be considered a translocation option and that research be initiated to ascertain its habitat and carrying capacity.
- 7] Following GAO recommendations offered 1981 to the present, we urge that protective acts (the MMPA in particular) be amended to clarify intent with respect to acts mandating conservation of fisheries (Fisheries Conservation and Management Act and Fisheries Promotion Act).
- 8] We recommend that FWS be allowed leniency in its schedule, providing time to address unresolved issues in the DEIS, time to revise the document removing bias and inconsistency in conformance with NEPA guidelines, and time, most importantly, to allow adequate review by officials at the regional and Washington levels.

CONCLUSIONS

In conclusion, FWS has given us no understanding of what translocation will accomplish to alleviate this longstanding conflict. Will translocation eliminate oil risk? Delist California's sea otters? Achieve OSP? Allow zonal management? Considering FWS 's preferred site, San Nicolas Island, how can translocation to a small island with a higher oil risk than the central coast (according to Dobbin) eliminate risk? How can 300-400 otters provide the basis for delisting or management, under current interpretation of law? Without resolution of these questions and ironclad guarantees of containment, we cannot support translocation. In any event, fishermen cannot support translocation to any site in Southern California.

To date the FWS research staff--a small group of people with a mission--has interpreted federal law and, in essence, decided policy. We ask Congressional guidance in defining the intent of protective legislation.

We seek amendments to allow management flexibility--management legality--and a reasonable incidental take of sea otters in fishing operations, protecting otters in designated areas. We believe these compromises are necessary if we are ever to resolve this problem, surely among the most impactful resource conflicts in the history of wildlife management. We believe that, through **zonal management**, we can protect sea otters and still enjoy multiple use of the nearshore. We are willing to work toward mutual compromise if we are guaranteed that our valued fishing/mariculture grounds will be preserved for human use.

TESTIMONY OF
WESTERN OIL AND GAS ASSOCIATION
BEFORE THE UNITED STATES SENATE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE OF ENVIRONMENT AND PUBLIC WORKS
REGARDING ENDANGERED SPECIES ACT REAUTHORIZATION

APRIL 18, 1985

1. Introduction.

The Western Oil and Gas Association (WOGA) is pleased to submit the following statement regarding the reauthorization of the Endangered Species Act of 1973. WOGA is a trade association representing companies that produce, refine, transport, and market petroleum and petroleum products in the western United States. Our testimony focuses on the relationship between the development of the oil and gas resources offshore California and the conservation of the California Sea Otter.

WOGA supports the reauthorization of the Endangered Species Act. We are confident that the development of the energy reserves offshore California is fully compatible with the conservation of the sea otter as required by the Endangered Species Act.

Nevertheless, the ongoing public concern regarding the status of the sea otter has resulted in significant restrictions on the leasing, exploration and

development of the Nation's most important new offshore oil and gas discovery - the Santa Maria Basin. These restrictions have taken the form of:

- Deletion of tracts from lease sales;
- legal challenges to tracts leased in Lease Sale 53; and
- The imposition of significant stipulations on the exploration and development of federal and state tracts.

Just recently the California Coastal Commission rejected an exploration plan within the OCS Lease Sale No. 73 area. This decision was based, in part, on the status of the sea otter under the Endangered Species Act.

For the last year we have participated in public discussions with the environmental community, the fishing industry, the Fish and Wildlife Service, and other regulatory agencies regarding possible solutions to several significant sea otter issues. Although progress has been made in the last year to develop a consensus regarding these solutions, it is clear to WOGA that the sea otter issue is unlikely to be resolved in the near future without further Congressional direction.

From the beginning, WOGA's goal in this matter has been the development of the energy resources in the

waters offshore of the State of California in a manner compatible with the protection of the sea otter. From the beginning we have also sought an understanding with the regulatory agencies and the environmental community regarding what measures will be required of the oil and gas industry to provide such protection for the sea otter. We remain committed to those goals.

2. The Status of Efforts to Resolve the Sea Otter Issue.

We wish to commend the efforts the Fish and Wildlife Service has made over the last year in conducting a scoping process under the National Environmental Policy Act (NEPA) to focus on the Service's proposal to establish a translocated population of sea otters at a site on the West Coast. The scoping process has been extremely valuable in bringing together representatives of regulatory agencies, the fishing community, environmental groups and the oil and gas industry to discuss issues related to the conservation of the sea otter.

Within the last two months the Service has circulated a Preliminary Draft Environmental Impact Statement (PDEIS) regarding the translocation proposal. The PDEIS contains some important new information regarding the status of the sea otter and the

translocation issue. However, it is clear to WOGA that considerable additional effort will be necessary before the document adequately discusses the environmental and economic effects associated with the translocation proposal and the alternatives to translocation. We appreciate that the PDEIS is only a preliminary document and does not express an official position of the Fish and Wildlife Service. Nonetheless, we firmly believe that, without additional legislative direction from Congress, the establishment of a translocated population as presently proposed will only worsen the conflicts generated by the sea otter issue and will not lead to a resolution of the issue. Further, the translocation as presently proposed may well result in significant new restrictions on oil and gas leasing, exploration and development activities.

3. WOGA Concerns With Translocation Proposal.

Our major concerns with the translocation proposal, as it has been described in the PDEIS, can be summarized as follows:

- (a) It has been argued that the establishment of a translocated population is necessary to reduce the risk to the sea otter from a catastrophic oil spill to an acceptable level. We have disagreed with the Service's

evaluation of the extent of any risk to the sea otter population from oil and gas related activities.

Nevertheless, if any translocation is to be authorized, it is critically important to WOGA that the Fish and Wildlife Service and other regulatory agencies clearly specify what additional mitigation measures, if any, will be required for offshore oil development and what other actions will be instituted to protect the sea otter. Otherwise, the translocation will only serve to broaden the area of potential conflict between oil and gas development and the sea otter without providing any legal assurances that compatible oil development along the California coast will be able to proceed. We believe that Section 10(j) of the 1982 Amendments to the Endangered Species Act (ESA) and the implementing regulations require the Fish and Wildlife Service to provide such legal assurances in an agreement with affected agency and landholding interests. To date, however, the Service has not committed to develop such an agreement with affected interests regarding any translocation and other important management issues involving the sea otter.

(b) The legislative history of Section 10(j) of the Act demonstrates that Congress intended the Fish and Wildlife Service to use the procedural mechanisms and

safeguards under Section 10(j) to establish experimental populations such as that proposed for sea otters. However, the Service has not committed that it will use the Section 10(j) process for any sea otter translocation. We suggest that the intent of Section 10(j) be clarified by specifying that an experimental population will be established in the wild outside the existing range of the species only under the provisions of Section 10(j).

(c) The Fish and Wildlife Service has also not indicated whether it intends to designate any translocated population as "non-essential" under Section 10(j) of the ESA (thereby exempting that population from the provisions of Section 7 of the Act). This is despite what WOGA believes was clear legislative direction in the legislative history of the 1982 amendments that, except in unusual circumstances, translocated populations will be designated non-essential. We believe that the provisions of Section 10(j) should be clarified to assure that, except in extremely rare situations, experimental populations will only be established outside of the existing range of the species if the Secretary can determine that the population is "non-essential" and that Sections 7 and 9 will not apply within any portion of the area designated for the experimental population.

(d) The PDEIS contains a preliminary draft of the proposed regulation to govern a sea otter translocation. It suggests that the Fish and Wildlife Service may decide to designate any sea otters found within the 20 fathom contour of the Santa Barbara Channel Islands as an experimental population under Section 10(j) of the ESA. Even if the Service designates the population as "non-essential", however, Section 10(j) as presently written would appear to require that Section 7 of the ESA continue to apply to any translocated animals that might stray into the Channel Islands National Park. This would effectively negate the purposes of the non-essential designation and could result in significant restrictions on leasing, exploration and development activities in the Santa Barbara Channel. Section 10(j) of the ESA should be modified to make it clear that any non-essential experimental population retains that status throughout the designated experimental population area.

(e) All parties to the sea otter controversy have agreed that containment of sea otters to any translocation site is a critical issue. Dispersal of otters from the translocation site will vastly increase the adverse impacts of the translocation. WOGA does not believe that the Fish and Wildlife Service has adequately

demonstrated that the containment of a translocated sea otter population to the translocation site is technically feasible. Before any translocation is authorized, it is essential that the Service commit the technical and financial resources necessary to assure such containment. Again, we believe that the 1982 amendments contemplated that the Service would make such commitments through agreements with affected agencies and landholding interests.

(f) WOGA believes that the Fish and Wildlife Service's translocation proposal is fundamentally flawed because the Service does not have the legal authority to translocate and contain sea otters under the Marine Mammal Protection Act (MMPA). The MMPA prohibits the "taking" of sea otters except for research purposes. The PDEIS therefore attempts to justify the translocation as a "research action" under the MMPA. It is clear to us that the translocation and containment of sea otters is primarily a recovery and management program and does not qualify as "research" under the MMPA. We are very concerned that the courts would ultimately prohibit the Service from containing the population to the translocation site unless the Service's authority in this regard is clarified.

4. Conclusion.

In conclusion, WOGA believes that considerable progress has been made over the last year to identify approaches to resolving the long-standing sea otter controversy. Nevertheless, it is evident to us that, without additional legislative clarification of the Service's authority to address the concerns discussed above, it is very unlikely that the Service will be successful in its efforts to resolve the conflict between various interest groups involved in the sea otter issue.

We believe that appropriate agreements and assurances to address concerns about any translocation and its relationship to protection of the existing sea otter population will be of critical importance in resolving the sea otter issue. We, therefore, particularly recommend that Congress amend the ESA to clarify that, to the maximum extent practicable, experimental populations should be established in accordance with agreements with agency and landholding interests that will be affected by such populations, and that the Secretary has the authority to include in such agreements understandings and assurances regarding the management of the species.



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Land Department
Outer Continental Shelf District
Area Office

May 7, 1985

Honorable John H. Chafee
United States Senator
Committee on Environment and Public Works
Washington, D.C. 20510

Dear Senator Chafee:

You have asked me to provide responses, on behalf of the Western Oil and Gas Association, to certain questions regarding sea otters for inclusion in the record of hearings held on reauthorization of the Endangered Species Act. Those questions and answers are attached to this letter. I hope that we have been responsive to your questions.

Thank you again for the opportunity to present our testimony to the Subcommittee.

Sincerely,

A handwritten signature in blue ink that reads "Kit Armstrong".

Kit Armstrong
for the Western Oil
and Gas Association

KEA:KK
Attachment

QUESTIONS ASKED OF WOGA BY SENATOR JOHN CHAFEE

QUESTION NO. 1

In written testimony, WOGA contends that Section 10(j) of the Act and the implementing regulations require the Service to provide legal assurances in an agreement with affected agency and lendholding interests that compatible oil development will be able to proceed after the translocated has occurred. Will you explain the basis for your interpretation?

ANSWER NO. 1

Section 10(j) of the Endangered Species Act, was added to the Act in 1982 to facilitate the establishment of populations of listed species outside of their current range. The legislative history of this provision indicates that it was developed out of an appreciation that public concerns regarding the effect of relocated populations on state fish and game activities and on private activities has effectively precluded the Service from establishing such populations. We believe that Section 10(j) was a recognition that the conservation of endangered and threatened species requires cooperative efforts between the public and private sectors which promotes the conservation of listed species. The legislative history to the 1982 amendments indicates Congress' strong desire to involve state and federal agencies and the regulated public and the designation of experimental populations to a greater extent than is normally provided for as part of the informal rulemaking process. In this regard, as noted in the preamble to the regulations implementing Section 10(j), the House Committee Report on the 1982 amendments indicated the following:

The committee believes that where experimental populations are released on, or near, private land, the landowners must be fully apprised of the release and the regulations under which the population will be managed. Regulations should be viewed as an agreement among the federal agencies, the state fish and wildlife agencies, and any landowners involved. Changes in the regulations should only be made after close consultation with all the affected parties. (H.R. Rep. No. 567, 97th Cong., 2d Sess. 34 (1982).)

Similarly, the report of the Senate Environment Committee stated the following:

"The involvement of State Fish and Wildlife Agencies in the experimental population regulatory process is crucial. In addition, where experimental populations are released on or near private land, the landowners must be fully apprised of the release and the regulations under which the population will be managed." (S. Rep. No. 418, 97th Cong. 2d. Sess. 9 (1982).)"

On August 27, 1984, Fish and Wildlife Service promulgated regulations to implement the provisions of Section 10(j). The regulations include the following provision:

"(d) The Fish and Wildlife Service shall consult with appropriate state fish and wildlife agencies, local governmental entities, affected federal agencies, and affected private landowners in developing and implementing experimental populations rules. When appropriate, a public meeting will be conducted with interested members of the public. Any regulation promulgated pursuant to this section shall, to the maximum extent practicable, represent an agreement between the Fish and Wildlife Service, the affected state and federal agencies and persons holding any interest in land which may be affected by the establishment of an experimental population." (49 Fed. Reg. 33893-33894 (August 27, 1984)).

We believe that the legislative history of the 1982 amendments and the implementing regulations, require the Fish and Wildlife Service in any sea otter translocation proposal to seek the agreement of affected state and federal agencies and private persons with interests in land that could be affected by the translocation. The Fish and Wildlife Service has proposed to translocate a population of sea otters to San Nicolas Island in the Santa Barbara Channel Island chain. As we have testified, this is an area of extensive oil and gas leasing exploration and development activities. A number of WOGA's member companies hold long-standing leasehold interests in areas in the Santa Barbara Channel including areas in the general vicinity of San Nicolas Island. Given the long history of conflict in California over the sea otter, and the fact that a large number of offshore

tracts have been affected, to a greater or lesser degree, by the presence of the sea otter, we believe that it is only appropriate for the Service to specify in any translocation regulation the restrictions that may be imposed on oil and gas leasing, exploration and development activities. This is appropriate not only because of the provisions of Section 10(j) and the implementing regulations, but because, from its inception, translocation has been proposed as a mechanism to reduce the risk of a catastrophic oil spill to an acceptable level. If the Fish and Wildlife Service is to translocate a population of sea otters to an existing oil and gas leasing, exploration and development area, it is appropriate that the companies receive some assurances that the translocation will, in fact, alleviate the regulatory concerns regarding the risk to the existing population from oil spills. Otherwise, the translocation will only expand the controversy over oil and gas development and the conservation of the sea otter.

QUESTION NO. 2

Are you proposing to conduct drilling operations in or adjacent to the existing sea otter range?

ANSWER NO. 2

The range of the California Sea Otter presently extends from approximately Santa Cruz on the north to Pismo Beach on the south. The habitat of the sea otter is generally within the 15th fathom curve or approximately the first 1/2 mile from the coast. To date, no oil and gas development activities have occurred either within the actual range of the sea otter or in areas seaward of the existing range. A number of outer continental shelf tracts have been leased by the Department of Interior in various lease sales in the areas seaward of the extreme southern end of the range of the sea otter. (See map attached.) Some exploration activities have occurred in this area. An application for a development and production plan on OCS Tract No. P-0409 has been submitted to the Department of Interior and the Department has initiated an EIS on this proposal and on the other tracts in this portion of the Santa Maria Basin. Depending on whether recoverable reserves are discovered in this portions of the Santa Maria Basin, other development and production plan applications may be submitted for the development of lease tracts in this area.

QUESTION NO. 3

If animals which were found outside of the existing range or proposed translocated area were designated as part of a "nonessential" population, subject to incidental take, would your concerns regarding future drilling activities be satisfied?

ANSWER NO. 3

No. Although designating any experimental population of sea otters as "nonessential" would assist the resolution of the sea otter issue, it would not resolve many of WOGA's concerns. First, Section 10(j) as drafted indicates that the "nonessential" designation is not applicable when there is the possibility of co-mingling of animals from the parent and experimental populations. Because sea otters are sometimes sited outside of their existing range, the possibility of co-mingling exists, and therefore it would be impossible for either the Fish and Wildlife Service or the regulated public to know whether they are dealing with a "nonessential" or "essential" animal. Second, Section 10(j) provides that the treatment of "nonessential" populations as "proposed" species under The Endangered Species Act is not applicable when members of the the species is within a unit of the National Wildlife Refuge System or National Park System. Several of the Santa Barbara Channel Islands are part of the Channel Islands National Park. Accordingly, the nonessential designation would not be effective to preclude full application of Section 7 to oil and gas activities in the event that any sea otters establish themselves within the Park. Thus, even with a non-essential designation, there is a possibility that Section 7 of the Act would be applicable to any and all agency actions in the Santa Barbara Channel area that "may affect" the experimental animals within the National Park boundaries. This would have the effect of negating, in large part, any of the protections afforded WOGA's members by the "nonessential" designation.

In addition to the technical concerns with the operation of Section 10(j) of the Act described above, WOGA has a number of other concerns which cannot be addressed simply by designating the experimental population as "nonessential". Several state and federal agencies have the jurisdiction and responsibility to regulate oil and gas activities in the interest of the California Sea Otter. These include the United States Fish and Wildlife Service, the California Department of Fish and Game, the Minerals Management Service, the State Lands Commission and the California Coastal Commission. Eighty-two state and federal offshore tracts within the Santa Maria basin have

been affected to one extent or another because of the existence of the sea otter despite the fact that the Fish and Wildlife Service has not concluded that these actions would violate Section 7(a)(2). These restrictions have included the following:

- Twenty-two tracts deleted from OCS lease sale No. 73;
- The imposition of significant sea otter stipulations on thirty-three federal OCS tracts and eight state tracts; and
- legal challenges to leasing of nineteen tracts in which bids were received.

As we testified, just within the last two months, the California Coastal Commission rejected an exploration plan in the Santa Maria Basin in part on sea otter grounds. As a result of the ongoing public concern to the California Sea Otter as evidenced by restrictions outlined above, WOGA has sought an understanding with the state and federal agencies and the environmental community regarding the measures that should be undertaken by the oil and gas industry to adequately provide for the California Sea Otter. The establishment of an experimental population of sea otters could be an important component of any resolution of the sea otter issue if the industry can receive adequate assurances that the establishment of the experimental population would not result in additional restrictions on oil and gas activities in the Santa Barbara Channel area and that the translocation will, in fact, reduce public concerns regarding the risk to the parent population from oil and gas activities.

We hope that these answers have been responsive to your questions. Again, we sincerely appreciate the opportunity to present our testimony to the Subcommittee.



STATEMENT OF THE
FRIENDS OF THE SEA OTTER
BEFORE
U.S. SENATE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
IN SUPPORT OF REAUTHORIZATION OF THE
ENDANGERED SPECIES ACT OF 1972

April 18, 1985

Washington, D.C.

FRIENDS OF THE SEA OTTER

P.O. BOX 221220, CARMEL, CALIFORNIA 93922

Testimony in Support of the
Reauthorization of the Endangered Species Act of 1972
To be presented to the United States Senate
Subcommittee on Environmental Pollution
April 18, 1985
Washington, D.C.

Friends of the Sea Otter appreciates the opportunity to testify here today on behalf of 4,700 members nationwide who are keenly concerned with the protection of the California sea otter and its marine habitat. We strongly support reauthorization of the Endangered Species Act with increased funding to insure that necessary listings are not delayed, and that once listed, species receive truly meaningful protection and aggressive recovery efforts.

We will focus our comments on the Southern Sea Otter, a species now known to be in far greater jeopardy today than was recognized at the time of its initial listing as threatened back in 1977.

In the past year we have gained an even better understanding of our inability to protect sea otters from oil spills. We have also seen the Secretary of the Interior award leases for offshore oil exploration as far north as Morro Bay -- deep within the southern portion of the otter range (Attachment #1).^{*} Just within the past month Secretary Hodel has revealed that his new Offshore Oil Leasing Plan would target three lease sales along the sea otter range and the Big Sur Coast within the next five-year time frame.

However, before focusing on the existing and ever-increasing oil spill threat to the otters, one area of apparent progress should be noted.

*Retained in committee files.

On January 21, 1985, the California Department of Fish & Game enacted an emergency ban on all large mesh entangling fishing nets set in waters less than 90 feet deep throughout the otter range (Attachment 2).^{*} For during the past decade, over 1,000 California sea otters are estimated to have drowned in these nets (Attachment 3).^{*} Urgency legislation to make the net prohibitions permanent has been introduced and is now moving through the state legislature with the strong support of the Department of Fish & Game, the State Attorney General and the U.S. Fish & Wildlife Service (Attachments 4,5 & 6).^{*} While the legislation has not yet been finally enacted, the firm bi-partisan support it has received from coastal legislators and others statewide is most encouraging.

However, we are all well aware that the entanglement mortality had not even been recognized at the time of the otters' listing as threatened. It was the small population size and range of the population (estimated to be 1,800 - 2,000 animals and expected to increase at 5% annually) and the offshore tanker threat that put the otters on the threatened list. Today, with a population estimated to number only 1,400 animals -- still menaced by tanker traffic and now vulnerable to offshore oil activities -- the most optimistic comment we can make is that stopping the net drownings may have brought us back to square one in the sea otter recovery effort. If there truly is a chance of recovering the California sea otter population, we can only now begin to take meaningful steps towards that goal. At the very least we would hope that with the net restrictions in place, the probable population decline will be reversed and thus the California sea otter will be spared immediate reclassification from threatened to endangered.

To turn now to the oil spill risk, recently two alarming incidents have underscored the daily vulnerability of California's sea otter population to a catastrophic oil spill.

*Retained in committee files.

*** On April 19, 1984, the Navy contract tanker Sealift Pacific lost power 12 miles off the coast and drifted to within one-and-a-half miles of shore in the middle of the Sea Otter Refuge just north of Point Sur. The Sealift Pacific carried 143,000 barrels of diesel fuel -- a volume greater than the entire amount of oil lost in the Santa Barbara blowout of 1969. Had the tanker not finally been able to find solid footing for her anchor, she would have broken up on the rocky shore, triggering the single greatest catastrophe to the California sea otter population since its near-extinction during the fur trade. No Coast Guard vessel or commercial tug could have reached her in time to prevent a disaster. (Attachment 8)*

*** On October 31, 1984, the tanker S.S. Puerto Rican exploded 10 miles west of San Francisco's Golden Gate Bridge. The resulting spill brought additional evidence of our inability to adequately contain or clean up an open ocean oil spill. State-of-the-art technology was unable to keep oil from slopping ashore 140 miles from the spill site. NOAA's oil spill trajectory model predicted the oil would go south. It did -- at first. But then it reversed itself by 180 degrees and moved 20 miles to the north overnight. Had it gone as far south as it went north, it would have entered the northern half of the sea otter range (Attachments 9,10) *

Clearly, if the California sea otter population is to have any real protection from tanker spills, serious efforts must be made to keep the big ships further offshore along the central California coast -- not only to lessen the chance of groundings, but to allow more response time in case of an emergency. Thus we have asked the U.S. Fish & Wildlife Service to initiate formal Section 7 consultation with the Coast Guard in regard to establishing vessel traffic lanes along the coast -- traffic lanes which could actually, in some instances, bring tankers closer to shore than they now travel. Furthermore, a commercial tug capable of assisting a large vessel in distress should be stationed within the sea otter range, thus providing

*Retained in committee files.

additional protection not only for the otters but for all the other sensitive central coast marine resources.

Those two near-misses also demonstrate the urgent need to get on with the establishment of at least one additional breeding colony of southern sea otters in an area unlikely to be impacted by any spill which could hit the existing otter range. We continue to favor San Nicolas Island for the first southern sea otter translocation site (Attachment 11).* While progress on this issue during the past year was initially encouraging, it now appears virtually impossible that the Service can meet its target date of September/October 1985 to begin moving animals, thus actual translocation may still be at least another year-and-a-half away. Moreover, to our knowledge, the Service has not yet secured the requisite funding for this crucial recovery effort.

We would also note our substantive disagreements with the Service's Preliminary Draft Rule on the Status of the Experimental Population. For example, we think there has to be more emphasis on research, a stronger commitment to containment and, above all, that the colony, if established under Section 10(j), should be designated as essential.

In making the determination of essentiality, the Secretary "shall consider whether the loss of the experimental population would be likely to appreciably reduce the likelihood of survival of that species in the wild." An experimental population of southern sea otters would clearly meet such a standard. For the Service has determined that the parent population has not grown in number for over a decade and may very likely have declined. In fact, the 1,400 California sea otters estimated to exist today represent only 70-77% of the 1,800-2,000 animals which were thought to exist at the time of the population's listing as threatened in 1977. Moreover, while several close calls over the past year have demonstrated that the threat to the

*Retained in committee files.

population from a tanker spill continues unabated, the encroachment of offshore oil and gas drilling just to the south of the established otter range -- and now leasing actually within the otter range -- has greatly increased the vulnerability of the population.

Furthermore, we fail to understand how the Service could correctly conclude that the southern sea otter population could not sustain the continuing losses in fishing nets, but then suggest that the loss of a similar number of animals taken to establish an experimental population would not appreciably reduce the likelihood of the survival of the species in the wild. For the risk to the parent population of removing animals for translocation is an acceptable one only because they would still be alive, and they and their offspring could be used to replenish the parent population should it sustain catastrophic losses in the future.

In summary, establishment of at least one additional reserve breeding colony of southern sea otters has been identified by both the Service and the U.S. Marine Mammal Commission as a critical step towards recovering and thus delisting the population. But we must remember that in the Commission's 2 December 1980 letter recommending recognition of the ultimate need for zonal management "pursuant to which the sea otter would be restored to additional sites within its former range ...," the Commission went on to identify sea otter zones as areas "that will be secure from threats ..." We fail to see how denying a translocated colony the protections of Section 7 consultation would meet that criteria.

We understand the legitimate concern of the oil and gas industry that the presence of sea otters who have dispersed from the translocation site could restrict existing or future offshore oil activities. However, in conjunction with the commitment to contain otters at San Nicolas Island, we believe language could be developed to assure industry that any restrictions resulting from Section 7

consultation would only apply to the animals when at the translocation site, i.e., San Nicolas Island, or of course, within the established sea otter range. The decision to contain otters at San Nicolas already represents a significant concession to the oil and shellfishing industries. To further deny those animals the Section 7 safeguards would defeat the purposes of translocation.

We wish to reaffirm our position that any consideration of translocation as a step towards possible zonal management should be consistent with the Marine Mammal Commission's December 1980 letter (Attachment 12).^{*} We further hope that today's hearing may serve as a catalyst for more productive discussions among all parties as to how we can satisfactorily resolve this issue.

*Retained in committee files.

STATE OF CALIFORNIA—THE RESOURCES AGENCY

GEORGE DEUKMEJIAN, Governor

DEPARTMENT OF FISH AND GAME
 1416 NINTH STREET
 SACRAMENTO, CALIFORNIA 95814
 (916) 445-3531



April 5, 1985

The Honorable John H. Chafee
 Chairman, Senate Subcommittee on
 Environmental Pollution
 SD 410, Dirksen Senate Office Building
 Washington, D.C. 20510

Dear Senator Chafee:

This is to provide you with the position of the California Department of Fish and Game regarding the reauthorization of the Endangered Species Act as it pertains to the California sea otter.

The sea otter in California has been protected by State law since 1913 when it was listed as a "Fully Protected Mammal" (Section 4700, Fish and Game Code). Under State law, no fully protected mammals or parts thereof may be taken or possessed at any time. Exceptions for scientific research may be authorized by the California Fish and Game Commission. In 1941, the State of California created a sea otter refuge, which was extended in 1959 to encompass all land west of Highway 1 to the State's three mile territorial limit from the Carmel River south to Santa Rosa Creek. Within this zone, it is illegal to possess any firearms except under special permit. Given these protections, a viable sea otter population now occupies a major segment of California's most productive coastline.

Throughout much of the twentieth century, the sea otter has been surrounded by controversy -- controversy over the shellfish it consumes, controversy over oil development, as well as controversy over management philosophies and objectives among different Federal and State agencies and special interest groups.

In many areas of the coast, in the absence of sea otters, shellfish resources grew and were subsequently harvested for commercial and recreational purposes. In the 1950's, as the sea otter expanded its range southward, conflicts with shellfish fisheries occurred. As a result, sea otters became the center of serious controversy between user groups -- those desiring to maintain an ever expanding sea otter population, and those desiring to harvest certain shellfish species for recreational and

commercial purposes. This controversy resulted in the adoption of California State Senate Concurrent Resolution No. 74, at the 1967 Legislative Session. The resolution directed the California Department of Fish and Game to determine the feasibility and possible means of confining sea otters within the existing sea otter refuge, or to explore other means that would maintain the existing abalone and sea otter populations and would lessen the possibilities of resource conflicts. A five-year research study was initiated by the Department in July 1968. However, with the enactment of the Marine Mammal Protection Act in 1972, which prohibited the taking of any sea otters, field studies were suspended.

The Department of Fish and Game believes that sea otters must receive continued protection, but their use of nearshore resources must be balanced with the historical use of these resources by man. We believe this can best be accomplished by "zonal" management, setting aside certain areas for sea otters and other areas for use by recreational and commercial fishermen.

In that context, the Department submitted a request to the U.S. Fish and Wildlife Service in August, 1974, for return of management authority to the State. A management plan submitted to the Secretary of the Interior proposed to use non-lethal means (capture and return) to restrict sea otters to the central California coastline between Seaside (near Monterey) and Cayucos (just north of Morro Bay, approximately 150 miles). The plan was opposed by a variety of environmental interests and found inadequate by the U.S. Fish and Wildlife Service. In January 1976, the State submitted a revised plan which ultimately was rejected. In 1977, the Department withdrew its application for return of management and was granted a research permit. Under the Federal permit, some taking (capture, tag and release) was allowed for research purposes, but no takings were allowed for "management" purposes. The Department has maintained a research program since that time (1977) to develop information and data on a variety of biological and life history issues for future protection and management of the sea otter population.

Any potential management program for sea otters was further impacted when the Department of the Interior classified the southern sea otter population as a "threatened" species in 1977. The determination was based on the potential threat to the sea otter population and its habitat from offshore oil spills. To eliminate or reduce any jeopardy to the sea otter population in the event of a catastrophic oil spill, the U.S. Fish and Wildlife Service subsequently recommended a translocation program to establish at least one additional colony of sea otters outside the current range.

The Department of Fish and Game has expressed its support, in principle, to a translocation effort within the historic range of the sea otter, subject to certain conditions and assurances on the part of the U.S. Fish and Wildlife Service. Conflicts between Federal and State agencies regarding a management approach for the California sea otter population are a product of each pursuing drastically different legislative mandates. While the State seeks to jointly manage sea otters and recreational and commercial fisheries, Federal law (Marine Mammal Protection Act and Endangered Species Act) affords strict and very clear priorities protecting sea otters, thereby severely limiting the management strategies available to California.

With the recent enactment of State regulations designed to eliminate accidental mortalities of sea otters entangled in gill and trammel nets, unrestricted population growth and range expansion will occur. In the absence of "zonal" management, the valuable recreational and commercial shellfisheries throughout the southern California mainland coast and offshore islands will eventually be impacted. Given the Department's legal mandates and responsibilities to all the people of California, we believe it is of paramount importance to not only provide for the continued protection of sea otters, but to provide for the continued recreational and commercial use of shellfish resources throughout the southern California Bight. Therefore, the Department of Fish and Game would like legal and financial assurances that the existing population (parent) can be restricted within specific geographical boundaries as part of an overall management and recovery program.

Specific authority to contain or restrict the existing population within a "zone" is not provided for in Federal law. We believe that translocation is only feasible if undertaken in conjunction with a legally implemented program that would provide the flexibility to use non-lethal methods (i.e. capture and return) to maintain sea otters north of Point Conception and to any potential translocated site within the State. We, therefore, recommend that the ESA be amended to give the Department of Fish and Game this flexibility. Only then can the State balance maintenance of fisheries against conservation of sea otters, thereby protecting the broad public interest.

Finally, translocation should not be undertaken unless accompanied by a comprehensive plan which includes specific goals and objectives pertaining to delisting criteria and procedures, as well as the development and determination of Optimum Sustainable Population (OSP), which must be realistic and consistent with the State's desire to protect both sea otters and shellfisheries.

Legislative language to implement the above suggestions will be provided by the California Department of Fish and Game at the Committee's request.

Sincerely,



Jack C. Parnell
Director

cc: Karen Spencer

STATE OF COLORADO
Richard D. Lamm, Governor
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WILDLIFE

James B. Ruch, Director
8080 Broadway
Denver, Colorado 80216 (297-1192)



Statement of Charles M. Haynes, Aquatic Research Biologist, Colorado
Division of Wildlife to the Subcommittee on Environment and Public
Works, on the Endangered Species Act, in regard to S. B. 725, the
Endangered Species Reauthorization, 16-18 April 1985.

In lieu of the opportunity to testify personally before this
Subcommittee, I respectfully request that this written statement be
appended to the Senate Record of these proceedings.

As a professional biologist who has been involved with western
U.S. natural resource issues and rare and endangered wildlife
conservation efforts for the past 12 years, I believe that my
experience provides insights which can be useful as the future and
structure of the Endangered Species Act (ESA) is under deliberation.
This statement will be relatively brief and will be addressed to two
areas pertinent to the question of reauthorization, and to the species
afforded protection by the Act.

First, I strongly support the reauthorization of the ESA in its
current form and request that no changes be made which would permit a
reduction of either the scope of the protection afforded any listed
species, nor should any species be removed from the list of protected

DEPARTMENT OF NATURAL RESOURCES. David H. Getches, Executive Director • WILDLIFE COMMISSION, James C. Kennedy, Chairman
Timothy W. Schultz, Vice Chairman • Michael K. Higbee, Secretary • Richard L. Divelbiss, Member • Donald A. Fernandez, Member
Wilbur L. Redden, Member • James T. Smith, Member • Jean K. Tool, Member

species that is not the result of careful, biologically meaningful deliberation. The ESA is one of the finest examples of compassionate and humane legislation by a western society on record, and this nation may rightfully take great pride in its existence. The ESA is far more than rules and policies--rather, it is a statement to peoples and governments throughout the world that the United States recognizes the rights of life-forms other than *Homo sapiens* to a continued existence and further, that we recognize our obligation to future generations of Americans and other nations as well. The Act offers then, existing representation to persons yet unborn. This is a moral and ethical action by a great nation. Moreover, the ESA and the principles that it espouses are critical in a worldwide context. Certainly the ESA serves as an important philosophical and practical model for other nations as they consider actions in behalf of endangered species conservation. That a fundamentally strong and protective ESA be reauthorized is particularly critical in light of the devastating worldwide trends in natural ecosystem loss and the frighteningly high rate of extinction.

We are entering an "Age of Mass Extinctions", the residue of which could well be an impoverished and unhealthy planet. Conservative estimates by a large number of noted authorities indicate that as many as one thousand species of plants and animals are becoming extinct annually and that by the 1990's, the figure may be expected to rise past ten thousand species per year (approximately one each hour). During the next thirty years, fully one million life-forms are expected to vanish. This loss, though largely centered in the tropics, will be

felt by all Americans since the great potential benefit that many of these vanishing species could offer humanity will never be realized. Consequently, future generations of Americans and peoples of other nations will inherit a planet that is far more depauperate than the one placed in our trust. Our relatively wealthy and advanced society can and should exert leadership in this crucial area. Since virtually all current extinctions here and abroad are the result of human activity (no thoughtful person can ever seriously debate this), it is our unquestionable responsibility to take action, however late, to reduce these losses and to provide impetus and guidance to the world's other peoples. Such is the mark of a mature and disciplined society. Such is the obligation of a great nation.

Secondly, I would like to address the suggestion made before the House Subcommittee on Fisheries and Wildlife Conservation and the Environment in regard to H. R. 1027, the Endangered Species Act Reauthorization Hearings, 14 March 1985 relative to the desire of individuals or groups with special interests that particular species, which are perceived to stand in the way of western water development, be removed from the full protection provided by the ESA. The species in question are the endangered fishes of the Colorado River System. I strongly oppose any reduction of protection for these or any protected species strictly on the basis of unrealized or perceived development opportunities. The endangered fish species of the Colorado River have been reduced in both number and range as a direct result of massive habitat alterations that are associated with historical development

practices (e.g., dams and flow/temperature changes) and their extinction is virtually assured if such practices continue without considering the biological needs of the species. Development activities in the Colorado basin during the 1930's-1960's were conducted largely without benefit of present knowledge or a present-day sense of responsibility. No one need feel any sense of guilt about this. At present, however, both scientists and the development community have a far better understanding of cause and effect and to permit water development to continue without consideration of this is both cause for guilt and an acknowledgement that we are not truly serious in our concerns about wildlife conservation. It is unfortunate that a few persons or groups within the western water development community have not fully accepted their ethical obligation to the perpetuation of wildlife species that are presently endangered because of their practices. Today, the question is rarely one of "development versus no development"; rather, it is one of careful and responsible development. Again, the mark of a mature society. To permit the removal of any endangered species from the list of protected species solely on the above grounds would cut the heart out of the Act and reduce it to a sham. Therefore, I respectfully request that no consideration be given by this Senate Subcommittee to any proposed alterations of the Act that would permit currently listed endangered species to be delisted, downlisted, or otherwise excluded from the protection of the ESA unless that species has first been recovered from its endangered or threatened status and that it is clear that it can survive without the Act's protection.

Thank you.



SENATE OF MARYLAND

ANNAPOLIS, MARYLAND 21401-1991

GERALD W. WINEGRAD
STATE SENATOR
DISTRICT 30
ANNE ARUNDEL COUNTY
841-3878/888-3878

ROOM 401
SENATE OFFICE BUILDING
ANNAPOLIS, MARYLAND 21401-1991

April 22, 1985

COMMITTEE
JUDICIAL PROCEEDINGS
CHESAPEAKE BAY COMMISSION

Honorable John H. Chafee
United States Senate
Washington, D.C. 20510

Dear Senator Chafee:

As you know, the reauthorization of the Endangered Species Act is now before the Subcommittee on Environmental Pollution. I would like to register my strong support for at least a five year reauthorization of this important legislation without weakening changes and particularly without any changes that weaken the Act for western water development.

The Government's Global 2000 Report warned us in July, 1980 that unless policies are changed, we may lose 15% to 20% of all species of plants, animals and insects on earth - from 500,000 to 2,000,000 species. Extinction on this scale is without precedent in human history. Besides the aesthetic, moral, religious, ethical and philosophical arguments against man's contribution to the loss of species, please consider the following:

1. Plant and animal species contribute greatly to medical science. Forty percent of the world's medicines have been synthesized from plants and animals;
2. Fifteen plants have been identified by the National Cancer Institute as being potential cures for cancer; extracts from more than 500 species of marine animals are known to have anti-cancer activity;
3. Extinction of large numbers of plants will deprive humankind of needed medicinals and perhaps anti-cancer drugs;
4. The loss of plants and animals and the genetic diversity they provide endangers food production as 80 percent of the world's food is derived from less than 24 plant and animal species. For example, wild subspecies and varieties of cereal grains are needed to breed resistance to pests and pathogens; and
5. Small insects from the tropics are already helping control crop pests.

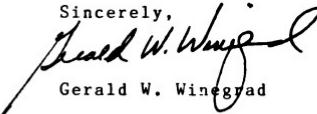
Clearly the extinction of species will deprive humankind of new food sources, pharmaceutical chemicals, natural predators of pests, building materials and fuels (biomass). The United States must set the example for the rest of the world in reauthorizing a strong and effective Endangered Species Act. I urge you to prevent weakening amendments to this essential legislation particularly through amendments to exempt western water projects.

On a related front, the administration's significant cut in funds for the implementation and enforcement of the Act and the failure to list additional species is substantially weakening the effectiveness of the legislation. Possibly you could work to prevent such spending cuts and to ensure the expeditious listing of endangered species.

On a personal note, I feel quite strongly that all creatures and plants have a moral right of survival. Not even the U.S. Congress can bring back the passenger pigeon or the Carolina parakeet, both of which have been exterminated in this century in this country by man's activities.

The Endangered Species Act has the overwhelming support of the majority of Americans. I urge your favorable consideration of a strengthened Act and appreciate your introduction of the reauthorization legislation.

Sincerely,



Gerald W. Winegrad

GWW/sy

April 25, 1985

Honorable John Chafee
United States Senate
Sub-Committee on Environmental Pollution
of the Committee on the Environment
and Public Works
Room 406
Dirksen Senate Office Building
Washington, D. C. 20510

RE: Statement on S-725
The Endangered Species Act reauthorization

Dear Senator Chafee:

This is to express my support and that of the Minnesota Department of Natural Resources for the retention of the Raptor Exemption Amendment, Section 9b of the Endangered Species Act. Despite allegations to the contrary, there is no evidence that this act and the regulations promulgated under it creates a situation of inadequate protection for the Peregrine falcon or any other raptor. Quite the opposite is true. Through this exemption, private raptor propagators have been able to assemble projects for the breeding of these falcons, provide the young falcons necessary for our peregrine falcon restoration projects in the Upper Midwest.

Minnesota has released 31 Peregrine falcons since 1982 and expects to release 30-40 falcons a year for the next 8-10 years. This spring we have had the pleasure of witnessing the return of our first falcon, a two-year old female, to the site from which she was released. We expect to have wild falcons breeding along the Mississippi River and the North Shore of Lake Superior in 2-3 years. Without availability of birds from private breeders, it would very likely be 1990 before we could expect to receive any falcons from the Peregrine Fund for this effort. We attempted to conduct a reintroduction effort in 1976 and 1977 with Peregrine Fund birds, but they were not produced in sufficient numbers to maintain the effort in the east and support our project also. Hence, it is clear that our project has been successful because of private falcon breeding efforts outside the Peregrine Fund.

The captive production of falcons is expensive. It is doubtful that a live chick can be produced for less than \$1,000.00. Therefore, whether obtaining birds from an institutional or private breeder, a mechanism needs to exist where the producer is fairly compensated for the expenses involved in such production. Under the regulations promulgated from the enabling language of the Section 9b amendment, breeders are allowed to receive such compensation from their efforts in those States where regulations complying with the Federal guidelines have been developed. We have been very restrictive and have licensed only one breeder to produce Peregrine falcons for sale to the State for reintroduction purposes. If 9b is stricken from the Act, this individual, and others that we deal with in other States will be unable to produce young birds so vital to our project.

The Federal guidelines were promulgated only recently, and adopted by various States within the past year, precluding the opportunity to test the current regulatory set-up. Hopefully Congress will employ the same sound thinking exhibited when the amendment was adopted in 1978 and maintain the exemption. We need legislation that will maintain and promote the tremendous support of private initiative to assist us with the recovery of the ~~the~~ ~~the~~ moose.

Sincerely,

Carrol Henderson
Carrol Henderson
Nongame Wildlife Supervisor
Minnesota Department of Natural Resources

CH:cs



STATE OF WYOMING
OFFICE OF THE GOVERNOR
CHEYENNE 82002

ED HIRSCHLER
GOVERNOR

April 16, 1985

The Honorable John Chafee, Chairman
Senate Subcommittee on Environmental Pollution
523 Dirksen Senate Office Building
Washington, D. C. 20510

Dear Senator Chafee:

Congressman Breaux has introduced legislation (HR 1027) which would extend the Endangered Species Act through FY-1988. While I do not disagree with the policy and purposes of the Endangered Species Act, I do object to the way in which it is being administered and enforced.

Section 2(c)(2) of the Endangered Species Act, as amended, states, "It is further declared to be the policy of Congress that Federal agencies shall cooperate with State and local agencies to resolve water resource issues in concert with conservation of endangered species."

All too often, it appears to me that state water rights are ignored by the federal agencies, and this has created various degrees of animosity between the states and the federal agencies. This situation is further aggravated when a state's water allocation, under a Congressionally approved interstate compact, can not be developed because of a ruling or finding of a federal agency. The Endangered Species Act needs to be amended to recognize the rights and values associated with state water management systems and interstate compacts.

To that end, I believe it would make sense to only reauthorize the Endangered Species Act for two more years. This two-year extension would be sufficient to continue the protections prescribed by the act, while at the same time, provide the states and members of Congress with an opportunity to explore amendments which will provide relief to the states.

If your committee addresses the Endangered Species Act this session, I would hope that you keep our concerns in mind and extend the Endangered Species Act in its current form for only two years.

Yours sincerely,
E. H. Selleck

EH/wwt

cc: The Honorable Alan K. Simpson
The Honorable Malcolm Wallop



American Association of Zoological Parks and Aquariums

EXECUTIVE OFFICE AT OGLEBAY PARK, WHEELING, WV 26003-1806 (304) 242-2100

April 17, 1985

OPPRESS

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Curator General
Fort Worth Zoological Park

President - Elect
GEORGE R. FELTON, JR.
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Greater Baton Rouge Zoo

Vice President
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St. Louis Zoological Park

EDWARD C. SCHMITT
General Curator
Denver Zoological Gardens

The Honorable John H. Chafee
Chairman
Senate Subcommittee on Environmental
Pollution
312 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Chafee:

The American Association of Zoological Parks and Aquariums submits this letter for the record on the reauthorization of the Endangered Species Act (ESA). The AAZPA is the largest professional zoological park and aquarium organization in the world. AAZPA represents virtually every major zoological park, aquarium, wildlife park and oceanarium on the North American continent and the vast majority of the professional staff members employed therein. AAZPA also represents and is the official spokesman for nearly 300,000 members of various zoological park and aquarium support organizations that offer assistance to zoological facilities in their communities. Collectively, zoos and aquariums in this country annually play host to more than 100 million visitors.

The goals and objectives of AAZPA are "to provide education, recreation and cultural enjoyment through the exhibition, conservation and preservation of the earth's fauna". The purposes of the ESA are to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved and to provide a program for the conservation of such species." We believe that the goals and objectives of AAZPA are supportive of and complementary to those of the ESA.

AAZPA plays an active role in the conservation and preservation of wildlife. Our Species Survival Plan strengthens and coordinates zoo breeding programs so that they can help in the worldwide effort to preserve vanishing species. The Plan seeks to (1) reinforce natural populations which have been reduced by human activities, disease or catastrophe; (2) provide animals for repopulation of original habitat when practicable; (3) serve as refuge for species destined for extinction in nature; (4) maintain repositories of germ plasma and; (5) conduct research and develop animal husbandry techniques to support both captive and wild populations.

A nonprofit, tax-exempt organization dedicated to the advancement of zoological parks and aquariums for conservation, education, scientific studies and recreation.

AAZPA supports the reauthorization of the Endangered Species Act without weakening amendments. AAZPA Institutional members have extensive experience with the Act, in particular with the permitting procedures established in section 10 (a) and (b). We support the continued limitation of permits for scientific purposes or for the enhancement of propagation or survival. The regulations establishing the criteria for these permits have been in tact since 1975 and have been changed several times. We believe this criteria provides needed checks and balances. There is already a burgeoning illegal trade in live wildlife and we support every effort to end that. We propose additional funding to enable full implementation of the Act.

Thank you for the opportunity to submit these comments for the record. We would be pleased to answer any questions and provide more information.

Most sincerely,

AMERICAN ASSOCIATION OF ZOOLOGICAL
PARKS AND AQUARIUMS



Robert O. Wagner

Executive Director

ROW/kdj
cc: Board of Directors

STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION
TO THE ENVIRONMENTAL POLLUTION SUBCOMMITTEE OF
THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE
REGARDING REAUTHORIZATION OF THE ENDANGERED SPECIES ACT

April 16, 1985

The American Farm Bureau Federation appreciates this opportunity to comment on the Endangered Species Act. Farm Bureau is the nation's largest general farm organization with a membership exceeding three million member families in 48 states and Puerto Rico.

Endangered species recovery has two fundamental components: identification of new populations and protection of known populations. Endangered species legislation should, within reason, promote both aspects. Since 1973, however, the Endangered Species Act has focused exclusively on providing penalties for interference with known populations. This negative enforcement mechanism not only ignores the basic need for identification of new populations, but has also been applied without regard to the legitimate property interests of farmers and ranchers.

Many currently listed species are present on or near private property in rural areas, creating a disproportionate impact on the agricultural community. Enlisting the voluntary cooperation of farmers and ranchers is therefore essential in both locating new populations and protecting known ones. Moreover, a reward system of a one-time cash payment is not an adequate incentive.

To provide an incentive for farmers and ranchers to report endangered species sightings and locations, new legislation should provide:

(a) That any species so reported will be relocated to federal or state lands where they will not interfere with the property interests of farmers and ranchers.

(b) If this is not possible, the federal or state government should compensate the landowner by purchase of an easement over the affected property at such a price so as to provide an incentive for reporting.

While the enjoyment and recovery of endangered species is supposed to be for the benefit of the general public, farmers and ranchers often bear a disproportionate cost for species maintenance. This is especially true where the endangered species is a predator (i.e., gray wolf or grizzly bear) that threatens crops and livestock. Under present law, agriculture has no recourse for damages caused by endangered species.

The Endangered Species Act must be amended to compensate farmers and ranchers who suffer crop and livestock losses due to

endangered species. As a public resource, these species must be maintained by the public as a whole, not by the agricultural community.

The Act as amended must make provision either for:

(a) Prompt removal of the offending species and indemnification for damage caused by that species; or

(b) Allow the affected landowner to "take" an endangered species that is causing damage to crops and/or livestock.

Although "critical habitat" is currently supposed to be designated whenever practicable, in practice it has been designated in very few cases. Farmers and ranchers are often prohibited from conducting certain practices on their land on the off-chance that an endangered species might be present, even though such property is not designated "critical habitat." For example, farmers and ranchers of over nearly 500 million acres of Western land that are infested with prairie dogs are restricted in the way they can control these destructive rodents because of the slight chance that the endangered black-footed ferret might be found. Restrictions of this type unduly burden agriculture at the expense of remotely marginal benefits, and also erode the spirit of cooperation with the farmers and ranchers that is necessary to achieve endangered species recovery.

We recommend that endangered species legislation should:

(a) Require designation of critical habitat for every listed species.

(b) Define as "critical habitat" in terms of current range and not historical range. "Current range" is only that area where the species is known to be present or has been sighted within the past 5 years.

(c) Restrictions concerning land use for maintenance of possible habitat should apply only to areas designated as "critical habitat."

(d) Critical habitat should contain the smallest area, based upon verified scientific information, necessary to sustain a viable population.

(e) Where private land is designated "critical habitat," compensation should be provided to the landowner for any loss of use sustained thereby.

Of growing concern to farmers and ranchers are programs, such as the Wolf Program, in Idaho, where endangered species are introduced in new areas to promote recovery. Such programs cause new and sometimes substantial damages to unsuspecting area residents.

With regard to such programs, the Act should be amended as follows:

(a) Strict liability of the federal government and indemnification for losses incurred by area landowners.

(b) No such program shall be implemented without approval of affected state and local governments, nor without a full public hearing in the affected area.

(c) Introduced species shall be located and confined to federal or state property.

Amendments to the Act must recognize and balance the concerns of private industry and preservation of endangered species. Current law, bolstered by Supreme Court decisions, focuses only on species preservation without regard to cost. This approach may have achieved marginal benefits in certain species preservation, but at the heavy cost of alienating farmers and ranchers, as well as others, from pursuing the goals of species recovery. The legislation should be amended to balance the risks and benefits of any listing, and to recognize agricultural concerns so as to resolve conflict in a way that is beneficial to both the species and to agricultural interests.

The Act should be amended as follows:

(a) Listing proposals should contain risk/benefit analysis.

(b) Listing proposals should indicate the amount of habitat and the number of species necessary for recovery. The Act should provide that any additional populations either be relocated to the designated habitat or not be subject to the taking penalties.

(c) Prior to listing, state and federal officials should solicit affected persons or organizations to identify possible areas of conflict between land use and species recovery, and to reach agreement on how to achieve the goals of both.

(d) Current law provides that in consultations between federal agencies and the Fish and Wildlife Service (FWS), the agencies may not take any action which FWS determines would jeopardize a listed species. The Act should be amended to also provide that an agency may not take any action in furtherance of preservation that is greater than what FWS determines is appropriate to preserve the species.

(e) The definition of "taking" and determinations of "jeopardy" should include only those activities causing physical harm to species.

(f) Listing proposals should identify and consider, in addition to a risk/benefit analysis, mitigation measures that will avoid conflicts between recovery and the activities in an affected area.

Better communication between FWS and the agricultural community is necessary to foster the mutual cooperation that is essential to further the goals of each. While not a legislative matter, such communication is vital to implementation of the Act. Farm Bureau is available to facilitate such communication.

Thank you for the opportunity to present our views. Your careful consideration of these views will be most appreciated.


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* Immediate Past Chairman
 † Honorary

April 15, 1985

The Honorable John H. Chafee
Chairman
 Subcommittee on Environmental Pollution
 Committee on Environment and Public Works
 United States Senate
 Washington, D.C. 20510

Dear Mr. Chairman:

The opportunity you and your Subcommittee have provided the American Mining Congress to comment on the reauthorization of the Endangered Species Act (ESA) is most appreciated, and I would ask that these comments be made part of the hearing record.

The American Mining Congress is an industry association that encompasses: (1) producers of most of America's metals, coal and industrial and agricultural minerals; (2) manufacturers of mining and mineral processing machinery, equipment and supplies; and (3) engineering and consulting firms and financial institutions that serve the mining industry.

Our primary goal is to focus on ways to make the Endangered Species Act more workable in its practical applications. To this end, much should be able to be accomplished through regulatory and administrative processes, without major legislative amendments to the statute.

We bring to the attention of the Committee the fact that the Fish and Wildlife Service has not issued regulations reflecting major amendments in the 1982 reauthorization.

Section 7 regulations have not been issued nor have regulations on incidental taking been promulgated. Exemption process regulations were published on the last day of February. Experimental population rules have been published so recently that only one non-essential population has been established. In the case of the latter two rules, the recency of publication and lack of experience under the rules precludes the judgment of their workability and the subsequent need for corrective legislative amendments.

The issues described above concern amendments that user groups supported in the 1982 reauthorization. To be denied the use of the 1982 amendments because of lack of implementing regulations leads to the question of whether these regulations will be issued during the ensuing reauthorization period if it is another three years. We propose that the reauthorization be limited to a two-year period to encourage the Fish and Wildlife Service to promptly promulgate the regulations.

We understand that the subject of endangered and threatened plants on private land may be a reauthorization issue. We strongly urge that this issue not be pursued during the reauthorization exercise. It is a highly controversial and volatile subject and would involve extensive research and concomitant changes in numerous laws.

Please allow us the opportunity to answer questions you may have concerning this statement.

Sincerely,

J. Allen Overton, Jr.
President



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April 8, 1985

The Honorable John Chafee, Chairman
 Senate Subcommittee on the Environment
 (Committee on Environment and Public Works)
 Dirksen Senate Office Building
 Washington, D.C. 20510

Dear Senator Chafee:

We oppose a four-year extension of the Endangered Species Act. A shorter extension is necessary to allow environmental and water leaders to work out problems which exist in the current system.

Misuse of the Endangered Species Act has caused unnecessary interferences with water management and construction of facilities necessary to meet human water needs throughout the United States.

Interstate water compacts, equitable apportionment decrees and state water law systems must be fully maintained in concert with administration of the Endangered Species Act.

We oppose any reauthorization of the Endangered Species Act for longer than two years, particularly if substantive amendments providing for full protection of state water rights are not made this year. A short reauthorization will allow state water leaders to further examine what amendments to the act will be necessary to protect state and interstate water allocation systems.

We favor efforts of the Fish and Wildlife Service to work for administrative solutions which preserve endangered species and fully respect needed water development for human consumptive use.

Yours very truly,

A handwritten signature in black ink, appearing to read "Lowell O. Weeks".

Lowell O. Weeks
 General Manager-Chief Engineer

DCM

TRUE CONSERVATION
 USE WATER WISELY

STATEMENT BY ROLAND C. FISCHER, SECRETARY-ENGINEER,
COLORADO RIVER WATER CONSERVATION DISTRICT,
GLENWOOD SPRINGS, COLORADO

HEARINGS ON S. 725 BEFORE THE SUBCOMMITTEE ON
ENVIRONMENTAL POLLUTION OF THE SENATE COMMITTEE
ON ENVIRONMENT AND PUBLIC WORKS
APRIL 16, 1985

The Colorado River Water Conservation District (District or River District) is a public agency created in 1937 under the laws of the State of Colorado (Colo. Rev. Stat. § 37-46-101) to conserve and develop the waters of the Colorado River and its tributaries within Colorado and to protect for Colorado the waters of the Colorado River System to which the State is entitled under the Colorado River Compact. Our jurisdiction covers all of twelve and parts of three other counties within the State on the western slope of the Continental Divide. The District is the major water policy agency of the State with respect to the principal headwaters of the Colorado River. I have attached a map showing the extensive area within the jurisdiction of the District. We also hold numerous decrees for the use of water for irrigation, domestic, municipal, industrial and hydroelectric purposes. The River District is currently a license applicant before FERC for a major multipurpose water conservation and hydroelectric project on the Yampa River in northwestern Colorado known as the Juniper-Cross Mountain Project. A sub-district of the River District has developed another multipurpose water storage project on the White River near Rangely, Colorado, known as the Taylor Draw Reservoir.

The River District offers its comments today as an entity that has been closely involved with provisions of the Endangered Species Act several times over the past decade. For example, in connection with our application for a section 404 permit from the Corps of Engineers for Taylor Draw Reservoir, consultation under section 7(a) of the ESA was required. That reservoir was very recently completed but construction could not commence until we acceded to certain river flows below the dam desired by FWS, coupled with a flat payment by the District toward FWS research needs. We viewed this arrangement as somewhat one-sided in favor of FWS's position as holder of the "jeopardy" hammer under section 7 of the Act.

The consultation process has also been involved in connection with our application to the Federal Energy Regulatory Commission for a license for the Juniper-Cross Mountain Project. That consultation began in 1981 and has contributed to substantial delay, expense and frustration to the District. While current activity on the project has been delayed by other causes, the District is keenly aware that FWS views with respect to the Colorado River squawfish and humpback chub, as well as with other species alleged to be endangered and suspected to be in the project area, can provide real difficulties unless constructive solutions and recovery plans are encouraged and developed so as to permit water conservation by storage as well as species conservation sought by the ESA.

In addition, the River District is interested in the ongoing ESA consultation between the Bureau of Reclamation and FWS in connection with the Bureau's Ruedi Reservoir in northwest Colorado. We expect to act as the Bureau's water marketing agency for water for domestic, municipal, agricultural, and industrial purposes. In short, the River District, by virtue of its jurisdiction and responsibilities in a water short region that is home for a number of species listed as endangered is particularly affected by the strictures of the Act.

The District has worked closely over the past fifteen months with the Colorado Water Congress Special Project and other western water entities in an effort to find some concord between the goals of the Endangered Species Act and the Western States' system of water law. As you may know, Colorado is the only state in the contiguous 48 into which no major streams flow. Hawaii is the only other state in which all the precipitation that falls over the state eventually flows out or is captured beneath the surface. Given that circumstance, and the fact of Colorado's prior appropriation system of water rights, projects designed to conserve and hold Colorado's water for beneficial public uses are absolutely essential. While we, of course, recognize that rivers contain only so much water and thus can support only a limited number of constructed projects, it is our view that the States' water appropriation systems must be allowed to allocate the scarce resource. The current FWS approach of requiring an up-front payment for FWS research needs as a condition of no-jeopardy has some benefit in that regard, but it fails to address the long-term needs of the species and it fails to recognize the States' water allocation systems.

The so-called "Windy Gap" opinion, and its application to subsequent section 7 consultations, is and should be an interim approach to possible conflicts between water resource projects and endangered species preservation. The "Windy Gap" process permits water projects to go ahead while contributing in a very tangible way to the conservation of endangered species. It is not, as some would maintain, a "purchase" of no-jeopardy. On the contrary, FWS makes the required no-jeopardy findings that the project "is not likely to jeopardize the continued existence of [the] species or result in the destruction or adverse modification" of the species critical habitat.

The Act also requires the Secretary of the Interior, through the Fish and Wildlife Service, to develop programs to aid recovery of endangered or threatened species. Indeed, one goal of the Act is to work toward delisting of species — to "halt and reverse" (emphasis added) the trend toward extinction. To that purpose, the agency has required

project sponsors to contribute to a research and recovery fund. This is the payment currently made pursuant to the "Windy Gap" approach and, until the working groups develop a comprehensive recovery plan, this approach fairly meets the needs of project developers and Colorado native fishes.

We should stress, however, that species conservation and ultimate recovery are national goals and, as such, should be supported by the public through federal funding. It is hoped that the "Windy Gap" interim approach will eventually give way to a more broadly funded recovery program.

Our efforts with CWC focus on the need for flexibility in the Act as implemented, and our preliminary studies and analysis tell us that the Act now contains the seeds for resolution of the apparent conflict between species protection and water rights. CWC has studied and developed creative alternatives to what heretofore has been a somewhat mechanical approach by FWS of looking at what we think are inflated flow requirements without looking at alternative means of recovery. In addition, CWC is participating in an Upper Basin working group in cooperation with FWS, the Bureau of Reclamation, state fish and wildlife managers and conservation organizations to develop a long-term preservation and recovery plan for Colorado's endangered native fishes. This long-term recovery plan would utilize a variety of measures, further described below, that provide an alternative to a water project moratorium or to constant delays and wrangling over each proposed project. The Act, as amended in 1982 to add section 2(c)(2), encourages use of those alternatives — and the River District certainly endorses them thus far. It is the District's view that CWC's careful biological and hydrological studies and current efforts to formulate creative alternatives forms the basis for a positive approach to avoiding water problems under the Endangered Species Act. The mechanisms for implementing these alternatives exist in the Act, and we hope the Committee will urge FWS to utilize them.

Specific alternatives that will lead toward preservation and recovery of fish species in the Upper Basin of the Colorado River include construction of fish passages at new and existing dams, hatchery and stocking programs, research and monitoring, modification of operation in existing or proposed facilities, habitat improvement measures, and construction of afterbays for regulation of water temperature. The Act places no real limits on the Secretary's choice of methods to effect species recovery, and this mix of tactics is fully in line with many of the extraordinary efforts undertaken on behalf of other species. The River District believes that these alternatives, if seriously considered and implemented by FWS as the Act requires, will serve not only the Act's purpose of species preservation but also the essential development of water for human needs. Congress should therefore encourage Interior to carry out its responsibility for recovery and eventual delisting of endangered fish species.

We emphasize that the measure described above are not "non flow" alternatives. That term is misleading because it hints that the fish can be protected without maintenance of stream flows. Nobody suggests that could be possible; instead, we believe that there will always be adequate flows for species survival as a result of the Colorado River Compact, which requires the average annual delivery of 7.5 million acre feet of water to the downstream states by the Upper Division states.

An important point here is that very little of the original Colorado River ecosystem remains. Any long-term plan for species recovery must recognize the changed system and seek to preserve the native fishes within those bounds. To maintain viable populations of these species within their current pockets of river, some extraordinary measures must, at first, be undertaken.

A synergy of factors have brought the endangered species to the current point of their decline. Some factors, such as intentional poisoning of over 500 miles of major rivers in the Upper Colorado River Basin and the systematic harvest of native species, have been halted, although their long-term effects linger. Other problems, principally

predation by introduced exotic game fish, continue unabated. We believe some of these problems can be mitigated, for example, by holding hatchery reared native fishes until they are large enough to escape predation; or by reducing the current stocking of exotics; or by revising the release of water from currently existing reservoirs to better accommodate the necessary temperature requirements of native fish life cycles. Further, Colorado state water law recognizes a beneficial conservation use of water for fish and wildlife, thus presenting no legal impediment to species conservation and recovery plans should purchase of water rights become necessary.

In light of the ongoing efforts of the CWC Special Project and the Upper Basin working group, the District fully supports Senator Wallop's recommendation that the Act be reauthorized in its present form for a period of two years, rather than for the five year reauthorization now contemplated in S. 725. A shorter period is necessary, we believe, to allow the administrative approach we advocate a chance to be implemented and to show its efficacy. If all involved look seriously at creative alternatives, further reauthorization of the Act two years down the road may be a simple matter. On the other hand, if the approach we suggest proves unworkable for whatever reason, that will be apparent within the shorter time frame and Congress can then consider alternative legislative solutions.

Moreover, FWS has been slow to issue its regulations implementing the 1982 amendments. In fact, its final regulations governing the new exemption procedure issued two months ago on February 28, 1985. To date, no final regulations under section 7's consultation provision have been promulgated. Clearly we should allow some experience under these regulations, but not such a long time that change is not possible should Congress see that its will is not being implemented.

The Colorado River Water Conservation District believes that the cooperative recovery approach described above is consistent with the Congressional intent of the Act. The River District therefore respectfully requests Congressional recognition and

encouragement of the ongoing efforts of CWC and the Upper Basin working group to develop a long-term conservation and recovery plan that will preserve the State's control over its water resources together with continued protection of native fishes listed as endangered.

We thank the Chairman, Honorable John Chafee, and the Subcommittee Members for this opportunity to submit a statement for the record on this very important subject.

Roland C. Fischer
Secretary-Engineer
Colorado River Water
Conservation District

TESTIMONY OF DEFENDERS OF WILDLIFE

ON S. 725

A BILL TO REAUTHORIZE THE ENDANGERED SPECIES ACT

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

OF THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

U.S. SENATE

APRIL 16, 1985

PRESENTED BY

JOHN M. FITZGERALD

WASHINGTON REPRESENTATIVE

ENDANGERED WILDLIFE PROGRAM

TESTIMONY OF JOHN FITZGERALD, DEFENDERS OF WILDLIFE, ON S. 725

MR. CHAIRMAN, ON BEHALF OF DEFENDERS OF WILDLIFE AND ITS 65,000 MEMBERS, I WOULD LIKE TO THANK YOU FOR THE OPPORTUNITY TO PRESENT TESTIMONY ON S. 725, A BILL TO REAUTHORIZE THE ENDANGERED SPECIES ACT.

This statement is intended to assist you in upholding the promise made in 1973 that Federal law would protect endangered species and enhancing the Act so that we can say in good faith to the people of every state and to the world community that we have not chosen extinction by neglect, that we will perform on our promise, and that it is not too late for much of the world to preserve the wildlife on which we truly depend.

I will first address the authorizations required to carry out the requirements of the Act based on current program requirements alone and not on what could be done in the best of all worlds. I will then discuss issues of law and policy now affecting the success of the Act. Finally Defenders provides additional detail in supporting documents incorporated as the remaining parts of this testimony.

A. AUTHORIZATIONS AND RESOURCES REQUIRED

In order to make the Act work as intended, it is quite clear that more resources are required. We will first provide a summary of the funding levels required and then an explanation.

Before reviewing the programs' actual requirements, it is worth noting that for the authorization levels to simply keep up with the inflation that we have experienced and that is projected (using the Congressional Budget Office's Gross National Product Deflator through FY 1988) the following authorization levels would be required.

As we begin to consider the level of resources necessary for the proper administration of the Act for the near future we should note the figures necessary to maintain the current authorization in real dollars through fiscal year 1988. For this purpose we have used the inflation indicator recommended by the Congressional Budget Office, which is the Gross National Product Deflator (GNPD). The factors provided by the CBO were actual figures for Fiscal Years 1983 and FY84 (3.9 % and 3.8%) and

projected figures from FY 85 through FY88 (3.4, 4.5, 4.5, and 4.28). The existing authorization levels were multiplied by the GNPDS for FY83 through FY88 to arrive at a figure that would reflect a constant dollar authorization through FY88.

(In millions of dollars)

Current Level (Set in 1982)	1988 Maintenance Level
ESA Section 15	Authorization Levels
(a) (1) Interior	27.
(2) Commerce	3.5
(3) Agriculture	1.85
(b) State Cooperation	6.
(c) Exemptions	.6
(d) International	.3
Total	39.25
	49.77

Summary Of Resources Required

In testimony before the House Appropriations Subcommittee on Interior, Defenders recommended the following appropriations based on a careful analysis of actual expenditures per species in listing and recovery and other documented needs of the program. A number of other major organizations recommended similar levels of appropriations in their testimony and over twenty organizations across the country have endorsed funding levels of this magnitude. We urge this subcommittee and the Congress as a whole to authorize appropriations for the agencies for FY86 through FY88 or beyond of approximately twice the level approved in 1982 in order to accommodate the recommended spending level and some growth in the "out years" and approximately four times the 1982 level for State Cooperative programs.

	FY1986 Defenders Recom.	Admin. Budget Est.
Listing	18,750,000	2,924,000
Law Enforcement	8,363,000	7,341,000
Consultation	3,900,000	2,552,000
Recovery	15,500,000	5,869,000
Research	5,200,000	4,252,000
(\$27 Mill. Authorized)	43,713,000	22,938,000
Cooperation with States	25,700,000	3,920,000
(\$6 Million Authorized)		
Total FWS End. Species:	69,413,000	26,858,000
(\$33 Million Authorized)		

The Merchant Marine Committee should also make it clear in its Committee Report that substantial endangered species programs should be a permanent part of the Bureau of Land Management and the Forest Service where good but small programs are now threatened with severe cuts. We have recommended to the Interior Appropriations Subcommittee that their funds be increased beyond the level experienced last year as follows:

Forest Service	+ 2,000,000	(not segregated)
Bureau of Land Mgt.	+ 1,050,000	*

Furthermore, the National Marine Fisheries Service will not be able to carry out its large mandate on endangered species without growing to the seven million dollar program level in the next few years, as part of the larger protected species program. We recommend for FY1986 a portion of that increase:

National Marine Fisheries Service	+ 2,590,000	(not segregated)
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Therefore, we recommend authorizations for the next three to five years as follows:

Section 15 (a) (1) (Interior)	\$ 50,000,000
(2) (Commerce)	7,000,000
(3) (Agriculture)	3,000,000
(b) (Cooperation	
with States)	26,000,000
(c) (Exemptions)	800,000
(d) (Convention Implementation)	400,000

Analysis of Resources Required

-Listing-

There are nearly four thousand species of plants and animals that are candidates for listing. Until they are reviewed and listed, they are unprotected by the act. The terms of the act envision that given the data required, qualified candidates be listed generally in about two years. The congress has wisely provided this general timetable because we have seen over and over again wildlife species decline rapidly to either extinction or a point where recovery is extremely expensive and does not allow for any substantial conflict with humans. To allow that to happen does not make economic, biological, or political sense.

To prevent that, we must provide the resources to survey the status of the candidates and list those that are endangered. In 1984 the Service already had information sufficient to warrant the listing of 1019 candidates. To list those species in even ten years, it will cost approximately \$5.75 million a year at current rates. To do the status work and list even a portion of the remaining 2711 candidates, presuming only some are found to warrant protection, would cost about 5 million dollars per year. Thus we recommend a total of \$10.75 million for listing.

At whatever level is possible, an increased investment in listing is probably the most cost-effective investment increase since without any further spending, listing puts agencies and others on notice that the species is protected and it allows the secretary and in some case, private parties, to act to prevent the taking of the species.

The lynx, the desert tortoise, and the western yellow-billed cuckoo are examples of candidate species that the service should review soon in order to determine what sort of protection should be provided.

-Recovery-

Recovery is the next important step. In the past year, the endangered palos verdes blue butterfly of California was apparently eliminated. Without sufficient recovery resources, we will see more extinctions occur even while species are listed and under the full protection of the act. It also costs several thousand dollars per plan to prepare recovery plans and to review and revise them every five years as the act requires. Yet about 48% of listed U.S. Species are not yet covered by a recovery plan. Another \$6 million should be provided to implement existing and anticipated recovery plans in FY86 given projected program activities at basically current rates. That results in recovery costs of \$15.5 million. We are not asking that the Congress fund every recommendation of every recovery plan. (For comparison's sake, the FWS recovery plan for the grizzly alone recommends that over \$6 million to be spent in the few years of activities projected by the plan.)

Endangered species that deserve better recovery help than they have received include the red-cockaded woodpecker and the black-footed ferret, which is nature's own prairie-dog control agent. Of the additional funds we recommend for recovery, approximately \$350,000 should be devoted to work on the black-footed ferret, including both work in the field and a captive breeding program that could begin at the Service's Pautuxent, Maryland facility, or at Washington State University while field work proceeds in Wyoming.

If \$15.5 million for recovery sounds expensive, we should realize that the sooner we make an effort to recover these species and ensure their conservation, the less expensive and intrusive those efforts will be. This is not the time or place to go over the basic arguments for preventing extinctions, but even this act has a process for deciding when we must choose a possible extinction over a specific expense or action that would be required to avert it. What we must not do is to choose extinction by neglect.

Cooperative Agreements

The third major area of concern is cooperative agreements with the states and other jurisdictions. This area allows the vast pool of expert personnel in the state agencies to carry out local and regional projects to enhance the habitat and survival of endangered species. The cooperative program

matches three Federal dollars to each state dollar invested in a cooperative agreement. It is also a means of sharing personnel, a particularly key factor when personnel ceilings are low. In regard to personnel ceilings, the Subcommittee may want to waive certain personnel ceilings imposed on the FWS itself by administrators and allow the appropriations and authorizations levels to control the amount of work that is undertaken. The congress should demonstrate a firmer commitment to this very effective program to allow the states to do the same. In order to restore the program to the real levels of funding for each agreement provided in 1977, even without planning for new species or agreements, it will cost \$25.7 million per year.

Consultation

The costs of consulting with other agencies to prevent jeopardy to listed species will rise somewhat in response to an increase in listed species. Even if these species are not listed promptly, it has been shown to be good management practice to consult or confer over the potential effects of projects on candidates expected to be listed to avoid having to make sudden changes in agency plans in response to listing. Any effective monitoring system for candidate species should have its own internal budget of at least \$500,000. This could be divided between the Listing and Consultation line-item activities. The appropriation for consultation should in either case be \$3.9 million. (See attached comments on Consultation below in Section F.)

Law Enforcement

Law enforcement activities should be supplemented by establishing a forensic laboratory and related capabilities for the FWS. This would cost \$2.5 million in the first year and \$2 million per year after that, of that \$700,000 would be an amount proportionate to the endangered species work done in forensics now. Better information, intelligence, and technical assistance systems are needed for the enforcement of the convention on International Trade in endangered species. These systems and related work have been estimated to cost \$330,000.

Recent cases involving the endangered Florida Panther and other species have shown that greater funding should also be provided specifically for the private rewards authorized in the act because private rewards can lead to very substantial information that enforcement officers cannot otherwise get.

In all we recommend a total of \$8,363,000 for endangered species law enforcement for FY86.

Research And Development

In research and development at least four or five new species programs should be initiated, preferably ones with as much general applicability as possible. Black footed ferret work is a high priority for the Department if additional research funds were provided for example. At the current average, this would cost another million dollars.

BUREAU OF LAND MANAGEMENT

The Bureau Of Land Management has done some very good work recently. Largely in response to this subcommittee's direction last year to enhance recovery work. However, it lacks the resources, such as botanists, fishery and invertabrate biologists, to adequately carry out its endangered species conservation and recovery mission. We recommend an additional \$1,050,000 to implement recovery plans that have not yet been activated, to add needed staff, and to increased the farsighted work on candidate species already begun.

FOREST SERVICE

There are indications that the forest service is also adopting a more comprehensive view of its endangered, threatened, and sensitive species. However, there have also been horror stories. For example, there has been repeated but entirely avoidable destruction of red-cockaded woodpecker colonies both on and off forest service lands while the forest service itself holds most of the habitat that can be protected, and hence holds the fate of the bird in its hands. The woodpecker was one of 8 endangered species for which the USFS had active plans. There are 62 more that have received minimal attention. We therefore recommend that the current allocation be increased by \$2,000,000

ENDANGERED AND PROTECTED SPECIES OF MARINE LIFE

The National Marine Fisheries Service (NMFS) of the Department of Commerce is responsible for the identification and recovery of endangered and threatened marine species. Nineteen marine species have been listed under the ESA, including all seven species of sea turtles, the shortnose sturgeon, several species of pinnipeds, and most of the great whales. All species of marine mammals, including those listed under the ESA, are also protected by the Marine Mammal Protection Act (MMPA). NMFS has combined activities and budgets authorized by the ESA and MMPA into its "protected species" line items for research and management. Our comments here are directed at endangered species work; however, we support continuing work authorized under the Marine Mammal Protection Act at at least the current levels as well.

A reduction from \$11.251 million to \$6.976 million has been proposed for protected species research and management line items in the FY86 NMFS budget. Funds available for research would be cut by more than 50 percent, to \$2.675 million. Marine Mammal and endangered species research is to be cut by \$1,500,000 and redirected to the Fisheries - Oceanography Coordinated Research Program (FOCI). We oppose any shift in funds at the expense of endangered and threatened species, particularly in light of the apparently continuing decline of some listed species such as the Gulf of California Harbor Porpoise and continuing damage done by debris and gear entanglement to other species. The Administration proposes to cut \$1,000,000 from debris and gear entanglement work as well. Research cuts also include \$600,000 for research on the endangered bowhead whale, and \$175,000 for research on the endangered Hawaiian monk seal. Even if a certain phase of research has been completed in these areas, work can shift to more active protection and recovery based on that research, such as establishing a reasonable critical habitat boundary of 20 fathoms for the monk seal and working with the fishing industry to protect that habitat. We have recommended restoring funds for each of the above areas, and we recommend the authorization levels be increased for future years. There is more work to be done. For example:

We recommend that \$50,000 be provided to develop and begin implementing a recovery plan for the Gulf of California Harbor Porpoise. The recent listing of this small cetacean presents a unique opportunity for bilateral work with the Mexican Government and perhaps our last chance to save the smallest porpoises on earth from extinction.

We recommend that an additional \$1,240,000 be made available for research and recovery work on endangered and threatened Sea Turtles.

These projected Sea Turtle expenses include:

- \$120,000 for further testing of the Turtle Excluder Device (TED) and for promotion of its use in the U.S. shrimp industry. The device, which eliminates the incidental drowning of threatened and endangered species of sea turtles, must be promoted. Unless there is aggressive promotion of the device, the voluntary adoption program, supported by the industry, the government, and the conservation community, will fall apart. In that case, public pressure, including possible court action, could force the agency to require the use of the TED through regulation.
- \$500,000 is needed for surveys of sea turtle populations. In order to provide adequate information for the status review of listed sea turtle species as required under the ESA, NMFS must conduct a thorough survey of U.S. waters in

order to estimate population sizes and trends. This requires expensive aircraft and boat time.

- \$500,000 is needed to expand the NMFS headstarting of critically endangered Kemp's ridleys at the Galveston laboratory. Unless substantially more juvenile Kemp's ridleys are released, the prospects for recovery of the population will remain very dim.
- \$70,000 is required as a U.S. contribution to preparing and supporting research for the second session of the Western Atlantic Turtle Symposium (WATS). WATS is providing a means for regional cooperation in the recovery of threatened and endangered sea turtle populations.
- \$50,000 is required to provide research and other support for the development of a recovery plan for Pacific sea turtle populations. The development of this plan is long overdue, at a time when pressures upon resident populations are increasing.

Finally, to do its work under the Endangered Species Act, NMFS must develop a system for identifying and evaluating candidates for listing under the Act. NMFS should also develop and propose a list of endangered and threatened marine plants and animals. NMFS does not have the capacity to do so on any regular basis. The most effective way to accomplish this may be to provide the funds and direct NMFS to develop both the system and the list in conjunction with an Institution such as the National Science Foundation, the National Museum of Natural History, or the Woods Hole Oceanographic Institute. We estimate that \$300,000 would be required for developing an appropriate system and that another \$1,000,000 would be required for developing the initial list.

Given the very expensive nature of marine research, a full program of status surveys, listing, and recovery work for endangered and threatened marine species could require approximately seven million dollars a year, certainly by FY88.

(For further detail on budget requirements, see the letter from Defenders et al to Chairman Breaux of February 22, 1985 which is attached along with supporting documents to the testimony on H.R. 1027 of members of the ESA Reauthorization Coalition, which includes Defenders, presented by Michael Bean, Environmental Defense Fund.)

B. THE CASE AGAINST AMENDING THE ACT TO ENCOURAGE SPORT HUNTING OF THREATENED WOLVES AND GRIZZLY BEARS.

On February 19, 1985, the U.S. Court of Appeals for the Eighth Circuit ruled that the Secretary of the Interior may not authorize sport hunting or trapping of a species listed as "threatened" under the Endangered Species Act (ESA). The Court upheld the decision of Judge Miles Lord in favor of plaintiffs Sierra Club, Defenders of Wildlife, The Humane Society of the United States, the National Audubon Society, and eleven other conservation and wildlife organizations.

The lawsuit had challenged the "sport trapping" season planned for wolves by Minnesota (where there are approximately 1288 wolves) on the grounds that the Endangered Species Act forbids such a general "taking" of threatened species unless the Secretary finds that excess population pressures within a given ecosystem cannot otherwise be relieved and that the taking would help to conserve the species. It is generally expected that this decision could also "affect the ability of the state of Montana to carry out its planned sport season on grizzly bears. Like the Minnesota wolf, the grizzly is listed as threatened in the lower 48 states, but the status of the grizzly population is less certain, consisting of between 400 and 800 individuals.

On behalf of ten members of the ESA Reauthorization Coalition, Michael Bean of EDF and author of The Evolution of National Wildlife Law, has defended the decision in his testimony on H.R. 1827 and noted:

[I]t is important to examine the court's decision closely.

First, the court did not limit the Secretary's authority to take or authorize the take of predating or depredating animals in order to protect life or property. Indeed, the court left open two different means by which this can be accomplished: general regulations authorizing predator control activities and special permits under Section 10(a)(1)(A) of the Act. The latter authority is equally applicable to both threatened and endangered species. Thus, the often preferred argument, that effective control of endangered or threatened predators is necessary to sustain public support for their conservation and deter vigilantism, can be accommodated under the court's opinion.

Neither does the decision limit the Secretary's discretion with respect to species that are part of an "experimental population." Instead, the court very clearly refrains from reaching any conclusion on that issue. Thus, the very narrow decision of the Court is that the Secretary may not authorize

sport hunting of a non-experimental, threatened species unless, as the Act's definition of "conservation" specifies, extraordinary population pressures cannot otherwise be relieved. That narrow prohibition will have virtually no impact on sport hunting in the United States because most hunted species do not face the threat of extinction within the foreseeable future. For a species that does, however, and is thus listed as threatened, the original drafters of the Act properly concluded that sport hunting of it would not be an objective of its conservation, but rather a permissible means, in very limited circumstances, of securing its conservation. Absent any new and compelling basis to reconsider that judgment, the conclusion reached in 1973 should be continued.

However, representatives of the Montana and Wyoming of Fish and Wildlife Agencies have today requested the Subcommittee approve an amendment to overturn the decision. The Department of the Interior would appear statement to prefer an amendment to allow increased hunting of grizzly bears and wolves and other threatened species, without officially proposing language to amend the ESA. It is quite difficult to come up with any responsible and wolves and other threatened species, without officially language that would allow more general taking of threatened species than is allowed by the Act as it now stands, even if one were to decide that that was good policy.

In response to questions from Chairman Breaux about amending the Act to allow more hunting of threatened species, Dr. Robert Davison, a wildlife biologist of the National Wildlife Federation has responded that it is the Federation's position that the basic purpose of the Act was to first bring about recovery of threatened species so they can be delisted and then to consider hunting them. In fact, the Montana Wildlife Federation has voted not to support any amendment such as that sought by the Montana Department of Fish and Game.

Public Support for Wolf Conservation

In a related development, on March 7, 1985, Professor Stephen Kellert of Yale University announced the results of a study on "The Public and the Timber Wolf" jointly sponsored by the U.S. Fish and Wildlife Service, the U.S. Forest Service, Defenders of Wildlife, and several independent foundations and donors. The study of attitudes of Minnesotans found that the strong majority of those both near and far from the wolves of northern Minnesota disapproved of sport seasons or other general reductions in wolf populations even where they are abundant. Although the vast majority support protecting wolves, they did agree with the humane taking of individual wolves that were guilty of killing livestock. In Minnesota and Montana the FWS removes predating animals, and Minnesota also compensates farmers for livestock losses due to wolf predation.

Support for the wolf is the general rule as the large majority of Minnesotans in every age, economic, and racial group feels that the wolf belongs in Minnesota and not just in places like Alaska.

Responses to Professor Kellert's survey indicate that significant levels of illegal wolf killing continue however. More than 40% of residents in northern counties and hunters from across the state reported knowing someone who had captured or killed a timber wolf, indicating that a high level of illegal take is still taking place. The USFWS estimates that from 280 to 250 wolves are illegally killed in Minnesota each year. To legalize further wolf kills when the population has not yet reached the recovered level, nor exceeded the ecosystem's carrying capacity would be most irresponsible.

In neighboring states, meanwhile, a modest recovery has begun as Wisconsin now has a resident pack of wolves, and Michigan has recently adopted the wolf as a symbol of its state wildlife programs.

Defenders' Position

The Act as it now stands requires that before any hunt or general taking of threatened species is permitted it must be shown that in a given ecosystem an excess population of the species exists that cannot be reduced without that hunt. Any proposed taking must also be shown to contribute to the conservation of the species. Neither the Montana Department of Fish and Game nor the Minnesota Department of Natural Resources has yet even attempted to meet these standards and it appears that Minnesota is not actively supporting any change in the Act.

The February 1985 Court of Appeals decision essentially upheld Congress's conclusion about taking of threatened species reached in 1973. That conclusion made good sense in 1973 and it makes good sense today, particularly when considered in light of the precarious nature of threatened species, the public support for such threatened species, including the wolf and grizzly bear, and the fact that this protective scheme has worked successfully for more than ten years.

Defenders has made it clear that it will judge every proposed hunt of threatened species on the merits of the data concerning each ecosystem as required by the Act. We are not opposed to every hunt of every animal in every ecosystem. We are

opposed to hunts of threatened animals when those hunts are not supported by good data and designed in accordance with that data.

We remain open to constructive discussions and cooperation to ensure the recovery of these animals in a responsible manner.

The Act requires that the Federal Government assist in the recovery of threatened species. Recovery of the existing populations of the Minnesota grey wolf and the Montana grizzly would not, according to available information, be aided by a hunt. The grey wolf population is at best holding its own against substantial illegal kills each year. The grizzly population is uncertain and may well be declining. In fact a task force of the Integregency Grizzly bear committee concluded that available population data did not permit the task force to ever confirm population 1984 stability in the grizzly bear bear population of the Ssouthern Continental Divide Ecosystem.

Proponents of the movement to weaken the ESA often argue that a sport season is necessary to successfully manage threatened speices and to reduce public animosity toward such species. These arguments have no basis in fact. The ESA, as presently drafted, grants the Secretary of Interior a great deal of flexibility in the management of threatened species. Diseased animals can be taken, as well as those that have killed livestock or threatened human life. In Minnesota, livestock depredation is minimal (less than 1/10 of one percent of all livestock is effected and less than 1/3 of one percent of all farms suffer losses) and has been successfully controlled by an animal damage control program administered by the Fish and Wildlife Service.

Without a practical need for an amendment and with much risk presented by an amendment, we must oppose any amendment to the Endangered Species Act or Committee Report language which would permit or encourage further taking of threatened wildlife.

(For additional detail, please see Sections II and III of this statement.* Portions of the aove section have also been used by the Endangered Species Reauthorization Coalition in the ESA Reauthorization Bulletin #12.)

C. HELPING PRIVATE LANDOWNERS WHO CHOOSE TO PROTECT THEIR ENDANGERED PLANTS

Since the Act was signed into law protection for listed plants has been minimal. In 1982, protection against collecting on federal land was provided in an amendment to the Act but

*Retained in committee files. 14

protection against intentional harm on federal lands and any taking on private land have not been addressed by the Act.

Unfortunately, most state and local police forces have little expertise in botany.

While it is quite possible to construct an argument that federal law could and should prohibit any taking of listed plants anywhere; to avoid running afoul of the constitution, we recommend that the Act forbid the intentional harming of listed plants on federal land and the taking, as defined in the act, of listed plants on land other than federal land without the express consent of the landowner. Landowner could be defined as the person who has a right to dispose of the plants on the land under state law, be that tenant, landlord, manager, or other interest holder. It should be clear that in no way is the intent of Congress to affect or override private rights of ownership. It is simply to recognize those in the Act and to bolster those rights by providing the expertise of the agency and sanctions of federal law for those who wish to conserve their endangered plants.

Even if this is not possible the Committee Report should contain strong language directing the Service to use its current authority more aggressively. That language could direct the Service to:

1. Implement a process for regular communication with nature conservancy groups, Heritage programs, wildlife organizations and garden clubs concerning the status of endangered and threatened plants, particularly those on private lands;
2. Implement voluntary management agreements or programs to provide advice and assistance to private landowners with listed plants;
3. Implement a program to alert and assist law enforcement agencies that have jurisdiction over the theft, destruction or illicit trade in private plants. This should include the aid of Service botanists, field and forensic personnel;
4. Develop and implement direct approaches for protecting plants such as acquiring from willing landowners small federal interests in plants on private land (already authorized under Section 5) so that collectors can be prosecuted under the existing federal criminal statutes for theft of federal property; Pursue the acquisition of easements related to plants on non-federal land which would provide a basis for protecting those plants. Pursue civil fines when evidence of the plant's federal origin is considerable but insufficient to meet the criminal standard of proof; and

5. Report to the Congress by September 30, 1986 on the status of plant protection and the enforcement of plant protection provisions.

D. MONITORING CANDIDATES SPECIES; CONFERRAL WITH DUE PROCESS FOR AFFECTED PARTIES

In order to provide some protection for category one candidates, which have already been determined to warrant listing, we suggest adopting the procedure of "conferral" now used for proposed species. This less formal and non-binding form of consultation would provide notice and an opportunity for advance planning. The Service would be in a good position to determine whether an emergency rule were warranted after conferral with the action agency.

Some have expressed concern about a lack of public notice inherent in candidate conferral, but the Service now provides public notice of its decision to move a candidate from category two status where it is studied, to category one status. Furthermore, the affected party in an administrative proceeding always has an opportunity to examine and rebut any evidence or assertion in the record. The Service and other agencies already engage in occasional conferral over candidates, but the hit or miss quality of that process to date has been troublesome. It should be a regularly required process, though less rigid than formal consultation. The rules adopted by the Service to implement candidate conferral could specifically provide that interested parties may present data concerning the intended eventual listing or habitat. Furthermore, if necessary, the Service rules could provide a period of 60 or 90 days during which any party that is interested or that would be affected by a candidate conferral process could augment or rebut data or assertions concerning the impact of a proposed project or action on the candidate (This process could be used in Section 404 permitting by the Army Corps of Engineers under the Clean Water Act, for example.)

Rules should make clear however, that notice of conferrals is to be provided and records kept in the regions and in Washington since the Service has not been particularly good about keeping records of its consultations in Washington.

It would also be advisable to extend the period of emergency rules from 240 to 360 days in light of the number of emergency rules (seven out of eight) that have expired in recent years before final rules could take effect.

The Service should also monitor generally the status of candidates and the effect of non-federal actions on those candidates, be required to issue emergency rules to protect candidates that face significant risks.

E. PREVENTING UNWARRANTED CONTAINMENT OF NATURAL AND EXPERIMENTAL POPULATIONS

In recent months there has been continued discussion particularly among interests affected by predators of the concept of zone management for such natural populations of listed species as sea otters, grizzly bears, and wolves. A certain amount of zone management is understandable and perhaps necessary in some cases, but some have suggested amending the Act to allow or require the "control" or killing of endangered or threatened predators in zones furthest from designated recovery areas.

This idea flies in the face of the Act's primary intent which is not to establish strictly limited outdoor zoos, but to encourage natural recovery in natural ecosystems. The Act already allows for the control of individual preying animals from threatened populations and even more flexible controls perhaps on experimental populations.

The result of a broadly worded amendment would be to turn the act on its head and say that a species has no right to exist outside of an "official" recovery area. That would foreclose the most efficient and natural progress toward delisting possible natural self-regulated recovery.

Therefore, Defenders would oppose any such sweeping amendment and urge caution in adopting even a mild form of such a process for any individual species such as sea otters.

The best way for the Committee to ensure that a unique sea otter amendment is not taken by the Service or others as an example of how most experimental populations and their natural source populations should be managed is for the Committee to make that very clear in its Report on the bill. In fact, it is the consensus of the ESA Reauthorization Coalition that such Report language is essential for the proper understanding of the sea otter amendment.

F. WESTERN WATER AND OTHER SECTION 7 CONSULTATIONS

The consultation process may be the backbone of the Act. Yet the spine of the Service has not stiffened in recent years. In fact, the Service seems to bend over backward to find "no

jeopardy" in the fact of distinct and clear threats to endangered wildlife. The "Windy Gap" process of allowing projects on the Colorado River to proceed without significant modification is one example. Before addressing that issue further we should note that the Service has failed repeatedly in consultations to protect other species such as the Red-cockaded woodpecker. It seems that in many cases, the Service will take the position that as long as some viable populations remain, any taking of members of the species, particularly by habitat modification, is permissible despite the contrary intent of the Congress as reviewed and verified by the Courts and as reflected in the regulations.

We are increasingly concerned about the lack of attention given by the Environmental Protection Agency to the effects of pesticide use on wildlife, including threatened and endangered species. For instance, in late 1983, a juvenile California condor was killed by an "M-44," a coyote control device containing the toxic sodium cyanide. Only after this incident were steps taken to protect the condor from these devices despite earlier warnings. In 1988 and 1981, six endangered gray bats were killed by the pesticide dieldrin, years after use of this substance was sharply curtailed by E.P.A. As the agency in charge of regulating use of pesticides, EPA should have investigated these incidents. There is no evidence of any action on E.P.A.'s part. It is not unreasonable to suspect that many more such incidents have been and are contributing to the continued decline of threatened and endangered species with insufficient consideration by the FWS as well.

The Service in recent years has been loathe to enforce the Act in regard to Western water. However, it should be acknowledged that the Act has in effect provided Federally appropriated water rights, or at least the ability to recognize and preserve instream flows, in order to protect listed species and their habitats. This is at it should be, for habitat protection is coequal with and necessary for the actual recovery of listed species. The question, however, is "Who should give up the use of what water in order to maintain the integrity of the ecosystems and the species on which they depend?"

Since 1981, the Service has been using an approach in which no one gave up very much in the way of water rights or uses. The Service apparently plans to give - up its rather unpopular and ineffective "windy gap" approach to consultations on the Colorado, which allowed depletion to continue in exchange for promises of research money to help determine when depletions should stop. This pitted a few scientists in a race against many developers, who are aided by much larger direct and indirect federal subsidies in many cases than the Service's Endangered Species Program has ever hoped to see. The Windy Gap process

almost turned the Act on its head by acknowledging a risk to certain species but allowing the threat to go forward until some point in the future when the Service might find not only jeopardy but actual destruction of species or habitat. The question here is, "With what will the Service replace windy gap?".

The Service has indicated that it believes it can force federal water projects, such as those of the Bureau of Reclamation, to schedule or increase releases of water. That may well be entirely appropriate, but the Service should not provide "no jeopardy" opinions for water-depleting projects based on great but uncertain expectations of replacement water from other sources.

The basic reality of western water is that the current western water law and practice together encourage the wasteful use of many times the water needed to protect the remaining species in their habitats. Further development would create severe allocation problems, even without the Endangered Species Act which is now in effect serving to assist the west in avoiding short-sighted resource management practices.

The answer to this conflict therefore, may lie in reform of the system that controls water allocations in the west. Such reform could serve to discourage wasteful uses and provide both the water needed for maintaining habitat and the water that is needed for economically viable agricultural, energy and other uses. Recent developments in interstate sale of water and the growing need to reduce the deficit by cutting federal subsidies both indicate a trend toward more efficient and realistic allocation of western water. This may require more changes in western states' water laws, in federal compacts concerning its distribution and allocation, and in some federal law.

In the meantime, there are many ways to avoid harm to species, through operation and design alternatives. The Act also provides an exemption process, as yet unused by western water developers, for truly urgent national needs that cannot help but endanger a species. In the final analysis we all must acknowledge, in the interest of our own survival and that of the west as we know it, that the integrity of western rivers and riparian habitat is itself a national necessity and that the Endangered Species Act was just the first body of law to recognize that.

G. ASSISTING LAW ENFORCEMENT

In early 1985, the Eighth Circuit Court of Appeals ruled in the case of U.S. v. Dion that the Act banned commercial take of listed species by Indians but not non-commercial take by an

Indian on his reservation where a treaty had implied a general right to hunt. The ninth circuit had earlier held that such implied general treaty rights could be overridden by general statutory provisions as in the Act.

The case of U.S. v. Dion sets before the Congress in 1985 the problem of Circuit Courts divided on the question of whether Indian Treaties which expressly or impliedly allow for traditional hunting and fishing rights are affected by the Endangered Species Act.

It is the position of Defenders that the Act should provide for such traditional religious uses as will not endanger the listed species but that this should be determined by the Secretary of the Interior through rulemaking and permitting procedures. Unregulated take is too dangerous when it affects such species and there is no objective reason why it should not be possible to provide for both recovery of the species and for the full exercise of first amendment and necessary treaty rights.

However, it may be useful to create a council including Native Americans to assist in making determinations under any permitting process. Such joint councils have greatly aided fishery resources allocations. More specifically on point is the precedent of the Alaska Eskimo Whaling Commission which assists the Marine Mammal Commission in regulating the subsistence take of endangered bowhead whales.

In fisheries and other areas where incidental take may be a problem, Indians and Tribes can apply for incidental take permits just like any other entity.

Recent experience with endangered Florida panthers and other species suggests that the Service should make greater use of its authority to provide rewards to private parties for law enforcement assistance. The Service should also explore other means of encouraging private citizens to assist in the enforcement of the Act. Recent surveys have shown that in at least one area of the country where listed species occur, more than 40% of the population reports knowing someone who has killed such an animal, in this case, the wolf in northern Minnesota. Information on offenders must surely be available. That is not to say that massive sweep operations are needed. A few prosecutions of the most egregious or repeating offenders would probably be sufficient to let people know that the Act is law and that a violation of federal law is serious.

In regard to enforcement in general, a law is no better than its enforcement. This is evident in the relative lack of prosecutions for illegal collecting of and trade in listed poaching of grizzlies and wolves, and the fact that private taking by means other than hunting, fishing or nest-robbing seems rarely the subject of civil or criminal enforcement under section 9 of the Act. Therefore, less direct takings have been allowed to proceed with apparent impunity, even without the incidental take permits provided for in the Act.

Further resources are needed but another requirement is a more aggressive attitude on the part of enforcement officials and policy makers.

H. SUMMARY

Defenders analysis of and experience with the Act and its implementation indicate that the Act itself is basically sound but the implementation is flawed. The Congress, and the authorizing Committees in particular must instruct the Administration to improve its record in applying the law. That record can be improved even without the increased appropriations we feel are warranted and badly needed. The Act itself would be improved with the protection of plants on the land of willing landowners, the clarification that not even Indians may legally contribute to extinctions, a monitoring system with use of conferral and emergency rules to stop serious declines or extinctions of candidate species, and a doubling of the funding authorizations.

[Defenders of Wildlife is one of the several organizations in the Coalition whose views were presented by Mr. Michael Bean of the Environmental Defense Fund. This statement supplements that of Mr. Bean and the Coalition.]

Thank you Mr. Chairman, that completes my statement, however, I would appreciate it if the following documents could be included in the record as part of Defenders' written statement.

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- II. MEMORANDUM ON WOLF AND GRIZZLY SPORT SEASONS*
 - III. STATEMENT ON GRIZZLY MANAGEMENT IN MONTANA *
 - IV. REVIEW OF ESA IMPLEMENTATION THROUGH 1984 *

*Retained in committee files.

**STATEMENT FOR THE RECORD
CONCERNING**

S. 725

Reauthorization of the Endangered Species Act

submitted by the

National Ocean Industries Association

and the

International Association of Geophysical Contractors

26 April 1985

The National Ocean Industries Association (NOIA) and the International Association of Geophysical Contractors (IAGC) are pleased to submit this statement for the record on S. 725, a bill to reauthorize the Endangered Species Act (ESA). NOIA is a national trade association with approximately 450 member companies that provide the services and equipment used in all phases of offshore oil and gas exploration and development. IAGC is an international trade association which represents virtually all of the geophysical exploration companies which do approximately 95% of the petroleum-finding geophysical exploration onshore and offshore the United States.

As you know, the Endangered Species Act (ESA) has been previously amended by the Congress and responds to a recognition that, under certain circumstances, natural resource exploration and use can be conducted in a manner that would not jeopardize the continuing existence of species protected under the ESA. The Act provides for conflicts between the ESA and federal actions to be resolved by a consultation process between the federal agency taking action which might affect a protected species and the Departments of Commerce (DOC) and the Interior (DOI) as appropriate. This consultation would be with either the U.S. Fish and Wildlife Service (DOI) or the National Marine Fisheries Service within the National Oceanic and Atmospheric Administration (DOC), depending on the species involved.

There have been numerous consultations and associated biological opinions developed in response to the Department of the Interior's Outer Continental Shelf leasing program. Many of these consultations and associated biological opinions have evidenced that there exist reasonable and prudent measures which can be taken by people obtaining permission to operate on the OCS that would result in no jeopardy to the species of concern. This revision of public policy provides for exploration and use of this nation's resources contained in the OCS for achievement of energy and mineral independence and security.

There has been, however, a double-bind situation for our industries because most of the biological opinions affecting the offshore industries have been about marine mammals protected under the Marine Mammal Protection Act (MMPA). Enclosed is a copy of 4 October 1983 letter to Mr. David C. Russell, then Acting Director of the Minerals Management Service (DOI), from Mr. William G. Gordon, Assistant Administrator for Fisheries (NOAA/DOC). Please refer to paragraph four of that letter which states that the biological opinion enclosed with the letter in no way permits the taking of endangered whales. This decision resulted from the fact that under Section 17 of the ESA, unless otherwise provided, no provisions of the ESA shall take precedence over any more restrictive provision of the MMPA. Under Section 101(a)(3)(B) of the MMPA, the "taking" of protected species of marine mammals can be permitted only for scientific purposes. Therefore, the biological opinion and reasonable and prudent measures offer no relief to the industry with respect to marine mammals. This is only one of numerous examples of this double-bind situation that has occurred throughout areas off the west coast of the United States and areas offshore Alaska which offer the greatest opportunity for future discoveries of energy and non-energy minerals for this nation.

Since public policy relative to species protected under the Endangered Species Act has been modified to allow for a balance between the preservation and enhancement of a protected species while allowing for natural resource exploration and use activities which can be conducted in a manner that does not jeopardize the protected species, we believe that the same balance should be extended to situations involving marine mammals. Therefore, we offer for your consideration and inclusion in the process of approving reauthorization for appropriations for the Endangered Species Act the following technical and conforming amendment to Section 17 of the ESA:

"Except as otherwise provided in this Act, no provision of this Act shall take precedence over any more restrictive provisions of the Marine Mammal Protection Act of 1972[.] except with regard to takings authorized by Section 4(d), 7(b)(4) and 10(a)(1)."
[Underlined language is recommended amendment.]

This technical amendment would provide for the authority of consultative agencies, which subsequent to development of a biological opinion offer either a no-jeopardy opinion, or in the case of a jeopardy opinion, reasonable and prudent measures which will assure no jeopardy, to extend to marine mammals protected under the Marine Mammal Protection Act. This amendment would also allow federal agencies to take actions which would enhance the propagation or survival of protected marine mammal species. If this amendment is enacted, the ESA and the MMPA will continue to offer protection of marine mammals when the appropriate federal agencies conclude that no reasonable or prudent measures are available to assure that the continued existence of an endangered species is not jeopardized.

Please contact Mr. Bill DuBose of the National Ocean Industries Association on 202/785-5116 or Mr. Charles Darden of the International Association of Drilling Contractors on 303/458-8404 or Mr. Larry Bowles of Geophysical Service Inc. (Chairman of the NOIA Environmental Conservation and Safety Committee and Chairman of the IAGC Public and Governmental Affairs Committee) on 214/995-7605 for additional information and any assistance that we could provide to assure the consideration of our recommended amendment.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Washington, D.C. 20235

F/M412:PAC

Mr. David C. Russell
Acting Director
Minerals Management Service
Department of the Interior
Washington, D.C. 20240

OCT 4 1983

Dear Mr. Russell:

Enclosed are the Biological Opinion and Statement Regarding Incidental Taking prepared by the National Marine Fisheries Service pursuant to Section 7 of the Endangered Species Act of 1973 (ESA), concerning the impacts of Outer Continental Shelf (OCS) oil and gas leasing and exploration activities associated with proposed Lease Sale 80 on endangered whales and threatened and endangered sea turtles.

Based on our review of the information on the proposed activities in the Sale 80 area and information on the biology and ecology of whales and sea turtles in the project area, we have determined that the proposed activity is not likely to jeopardize the continued existence of any of the species or populations considered in the Biological Opinion. We remain concerned about the cumulative effects of offshore mineral exploration and development on endangered and threatened species and recommend that the Minerals Management Service continue to monitor sea turtle and whale populations to determine better the effects of OCS related activities on these species.

New information on the timing, location, and nature of activities associated with OCS oil and gas leasing and exploration, and exploration plans and permit applications should be reviewed by the Department of the Interior on a case-by-case basis to determine if additional consultation pursuant to Section 7 is required.

The enclosed Biological Opinion in no way permits the taking of endangered whales. Such taking, unless properly permitted, is prohibited under Section 9 of the ESA and under Section 102 of the Marine Mammal Protection Act (MMPA). Section 17 of the ESA states that unless otherwise provided, no provision of the ESA shall take precedence over any more restrictive provisions of the MMPA. Under Section 101(a)(3)(B) of the MMPA taking of depleted species of marine mammals can be permitted only for scientific purposes. Therefore no statement concerning incidental taking of endangered whales pursuant to Section 7(b)(4) of the ESA is appended to our opinion.

No sea turtle mortality has been reported incidental to OCS activities off California, and we do not anticipate any. Therefore, we have not provided an estimate, pursuant to Section 7(b)(4), of an acceptable level of mortality. Our statement concerning incidental taking contains the following conditions: any mortality of sea turtles associated with activities conducted under this lease sale be reported to the Southwest Regional Office as soon as practical, and that your Pacific OCS Office staff cooperates with the Southwest Region staff in reviewing the circumstances to determine if measures need to be developed to prevent or mitigate additional mortality.

I look forward to continued cooperation during future consultations.

Sincerely yours,



William G. Gordon
Assistant Administrator
for Fisheries

Enclosures



UNIVERSITY OF MINNESOTA
TWIN CITIES

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1988 Fitch Avenue
St. Paul, Minnesota 55108
(612) 376-4760

April 13, 1985

Honorable John Chaffee
United States Senate
Sub-Committee on Environmental Pollution
of the Committee on the Environment
and Public Works
Room 406
Dirksen Senate Office Building
Washington, D. C. 20510

**Re: Statement on S-725
The Endangered Species Act Reauthorization**

Dear Senator Chaffee,

With regard to the controversy concerning the maintenance of the Raptor Exemption Amendment (section 9b) of the ESA, one of the arguments presented by those who would see the amendment removed is that the efforts of captive propagators have not contributed significantly to the recovery of the Peregrine falcon. As a corollary it is suggested that the Peregrine Fund represents the sole extent of our country's need for peregrine propagation and restoration. The former statement is entirely erroneous and unfounded and the latter represents a position of extreme short-sightedness and a lack of understanding of the realities of animal husbandry and propagation.

I am the coordinator for the Peregrine Falcon Restoration Project for the State of Minnesota. Our project is comprised of a consortium of individuals and institutions including the University of Minnesota, the Minnesota Falconers Association, the Nature Conservancy, the Minnesota Department of Natural Resources, the U. S. Fish and Wildlife Service, and the U. S. Forest Service. The Upper Mississippi River Valley contained, at one time, a substantial population of Peregrines, numbering about 30 pairs of birds nesting along the cliffs between the Twin Cities of Minnesota and Dubuque, Iowa. There were also birds nesting along Lake Superior's North Shore and in the Boundary Waters Canoe Area. As elsewhere in the country, all of these falcons had disappeared by 1965.

Following the lead of the Peregrine Fund at Cornell University, we made an initial attempt at Peregrine re-introduction in 1976 and 1977 with falcons provided by the Fund, 5 in 1976 and 3 in 1977. The effort was not continued due solely to the fact that the Peregrine Fund was unable to produce sufficient numbers of young falcons to

HEALTH SCIENCES

maintain their effort in the East and also sustain another thrust in the Midwest. We began our second thrust in the summer of 1982, releasing 5 falcons and have maintained the effort in 1983 by releasing 10 falcons, and in 1984, when we released 11 falcons at the site along the Mississippi River and 5 more at a newly developed site along the North Shore of Lake Superior. NONE OF THESE FALCONS CAME FROM THE PEREGRINE FUND. Rather all were produced and purchased by our group from private propagators in the Midwest and Canada. In 1985, we anticipate releasing 30-35 young falcons at our two formerly used sites along with a new site atop the Multifoods Building in downtown Minneapolis. Again, all of these falcons will be coming from private propagators. We expect to continue our thrust for the next 8-10 years and it is doubtful whether a single Peregrine from the Fund will ever be used in the project. Additionally, we are obtaining falcons from the private breeders for substantially less money than the cost proposed to us by the Fund when we inquired about the possibility of having them produce falcons on consignment.

I would like to address another aspect of the touted sole--proprietorship concept of the Peregrine Fund from the perspective of a veterinarian. As of this fall, the Peregrine Fund will be maintaining two facilities instead of three, the major facility at the World Center for Birds of Prey in Boise, Idaho and the other in Santa Cruz, California. Having all of the breeding stock for the restoration of the Peregrine falcon housed within two facilities is an invitation to catastrophic loss and abrupt cessation of the program from factors such as fire, storms, and disease. As a parallel, everyone involved in Endangered Species Management should reflect on the article by Christopher Joyce in the January 31, 1985 issue of the New Scientist in which he recounts the circumstances leading to the loss of 1/5 of the endangered Whooping Crane flock at the U. S. Fish and Wildlife Service's Research facility at Patuxent, Maryland in the summer of 1984. The cause of the mysterious deaths was ultimately traced to a virus related to the one that causes Eastern Equine Encephalitis, but had been heretofore unknown as a pathogen for Cranes. Paraphrasing scientists and veterinarians from Patuxent after the problem had been handled, Joyce comments: "What has been learnt from this episode of avian forensics? One lesson, already known but now emphatically undusted, is that a single community of endangered animals is at high risk before the unexpected. The ultimate goal of the (crane) programme is to establish three flocks in the wild with a total of 80 breeding pairs. The sooner a new flock is reproducing, the safer the species." The implications of this line of reasoning are broadly applicable and unquestionably should influence our thinking about management of Peregrines. Again, the birds originally in the hands of private individuals in the 1970's (then held largely for falconry purposes) provided the core of the breeding stock that has launched every successful effort at breeding and releasing Peregrine falcons to date. In the future, falcons held by private individuals, whether for falconry or breeding, can economically and positively provide the needed buffer to protect Peregrines as a species, whether in the wild or in captivity, from unexpected, unpredictable catastrophic losses.

The continental and western populations of Peregrine falcons have been brought back from the brink of extinction, at least for the time being, by the efforts of falconers-turned-propagators. This effort has been sustained by these individuals for two reasons: 1) because of their undying love and admiration for these magnificent birds and the absolute refusal to accept the notion that they should be allowed to pass from the face of the earth because of human ignorance, and 2) because many of these people see captive propagation as the only likely means of being afforded the opportunity to fly a Peregrine as has been done by our predecessors for over 4,000 years. Removal of 9b from ESA would totally eliminate a small, but highly dedicated and effective group of people from contributing to the overall effort and would result in a great prolongation of the recovery. Though legally regarded as endangered, I believe we are at the point where, from a practical perspective, as long as private individuals are allowed access to the bird, the Peregrine is no longer and never again will be endangered. Currently, there are more Peregrines in the wild than at any time since 1960, the captive population is fairly diversified and being well-maintained, and we as a society are keenly aware of the problems of environmentally sensitive species. To continue to regard the Peregrine as a sacred cow that can only be maintained in the stewardship of a privileged few, preferably at the government or institutional level, is tripe and those that promote this notion are horribly uninformed about the realities of the status and position of the Peregrine.

Over the years, many individuals and groups have championed the cause of the Peregrine, but the falconers and propagators alone have initiated the actions necessary to save the bird from extinction, while others have done little more than pay lip service to the need for a broadly-based approach to the bird's management. I challenge your distinguished committee, Mr. Chairman, to find a single contribution to the recovery of the Peregrine falcon, by those advocates of the repeal of 9b and the propagation regulations promulgated under its authority in August 1983, that equals the effort and significance of achievement of the production of a single live Peregrine chick by the falconer-propagator.

Without extending this diatribe any further, I strongly urge you to seriously evaluate the arguments presented by the North American Raptor Breeders Association and the North American Falconer's Association regarding 1) the status of the Peregrine, 2) the contributions of all involved in their management, 3) the lack of evidence that any activities authorized by the present legislation and regulatory scene have had ANY measurable adverse effects on wild Peregrine populations, and 4) the fact that propagation of falcons by private breeders, whether for commercial, recreational or reintroduction purposes, is in its infancy, and it is entirely premature to make any decisions about the need for legislative changes.

Effective management of endangered species requires the flexibility to respond to dynamic situations. Hence, the conduct of the effort needs to be controlled at the level of the regulatory agency. To eliminate the enabling legislation of 9b would severely cripple the recovery effort of the Peregrine Falcon. I can say without equivocation, that our effort in Minnesota could no longer be sustained without the contribution of falcons from private breeders and their efforts cannot be maintained without a mechanism by which they can be fairly compensated for the Herculean efforts.

I thank you for your time and consideration of this matter.

Very sincerely,



Patrick T. Redig DVM, PhD
Assistant Professor
Medical Director, Raptor
Research and Rehabilitation
Program, Univ. of Minn.
Coordinator for Peregrine
Falcon Restoration
in Minnesota

Please print this letter in its entirety in the proceedings of the hearing.

Testimony of the
Natural Resources Defense Council
Native Plant Society of Oregon
New England Wild Flower Society
Waimea Arboretum and Botanical Garden
and
Mrs. LaVerne R. Collard,
before the
Subcommittee on Environmental Pollution
concerning
Reauthorization of the Endangered Species Act

16 April, 1985

The Natural Resources Defense Council, Inc. (NRDC) is a public-interest environmental organization of 45,000 members. Since 1978, we have sought to improve programs, including the Endangered Species Act (ESA), that protect rare species of plants. The Native Plant Society of Oregon (NPSO) has over 600 members in 9 chapters around the state. NPSO is 25 years old. The New England Wild Flower Society (NEWFS) has over 3,000 members, primarily in New England. The NEWFS is over 50 years old. The Waimea Arboretum is a privately owned institution that provides a gene pool of wild plants for use by researchers. LaVerne Collard for many years has led efforts by the National Council of State Garden Clubs to promote landscaping with hardy native plants.

The Subcommittee on Environmental Pollution has been helpful in the past, adopting amendments to the ESA and Lacey Act that increased legal protection for our native flora. Unfortunately, our task is not yet finished. The ESA does not yet provide adequate protection for plant species.

Two of the weaknesses are generic to the Act: lack of adequate resources to carry out listing, recovery, and other components of the program; and failure to protect candidate species. Because of the large number of candidate plant species and historic and continuing delays in listing them, these issues affect rare plants disproportionately. These issues are discussed more fully by the Environmental Defense Fund in a statement to which we subscribe.

A third weakness of the Act uniquely affects plant species: whereas the Act broadly prohibits the "taking" of any endangered animal, only listed plants occurring on federal lands are protected from taking, and then only when the plant is "reduced to possession," i.e., collected for use in horticulture

* Operation Wildflower Chairman, National Council of State Garden Clubs

or as a pressed and dried specimen. That means vandals may cut, uproot or otherwise destroy endangered plants on federal lands without violating the Act. On private and other non-federal lands, the Act does nothing to prevent vandals, collectors, and others from destroying or collecting imperiled plant species.

The ESA does prohibit interstate and foreign commerce, import, and export of listed plant species without a permit. However, it is not clear whether the term, "interstate commerce" is sufficiently broad to outlaw one hobbyist sending a "gift" of a collected plant to another.

Mounting evidence shows that effective plant conservation requires more than the Act provides. Many listed or candidate plants have been seriously reduced through overcollecting.

In 1984, the extremely rare Virginia round-leaf birch, Betula uber, suffered a dramatic setback at the hands of mankind. This tree had only thirty seedlings at the beginning of last spring, all on private land. Eighteen of these shortly disappeared, apparently due to collecting or vandalism. Although this tree was thus reduced to a known population of only 11 mature or sapling trees and 12 seedlings, the malicious action was not a violation of the ESA or any other federal law. While the Virginia round-leaf birch is not a particularly attractive species, it is sought because of its rarity; at least one nursery is offering what are said to be propagated plants.

Sarracenia oreophila, the green pitcher plant, was listed as endangered in 1979. It is one of the rarest carnivorous plants in the world and highly sought-after by the specialist collector. Since all populations are on non-federal land, it is legal to collect it as long as the plants are not sold or bartered. In 1981, several plants were taken from one bog in Alabama. In 1984, a man from Florida travelled to Alabama to collect plants, returned to Florida and mailed specimens of the wild-collected plants to several people in other states.

Because of poor enforcement of existing trade controls (of which, more below), we have difficulty documenting additional cases of listed plants having been collected. However, we have seen correspondence from cactus dealers offering to collect and sell listed cacti. Furthermore, we can cite other examples of collecting of proposed or candidate plant species under circumstances that would remain legal after the species' listing under the Act's current limited wording.

Pediocactus knowltonii. This tiny cactus, one of the first to be listed as endangered, is a collectors' item because of its diminutive size and large flowers. Between 1965 and 1981, its population was reduced from about 5,000 to 1,500 by flooding by a dam and commercial collecting of many of the remaining plants. The landowner was unable to prevent people from entering his land for this purpose. FWS botanists contend that only because

collectors believe that the population is too depleted to reward a collecting trip have they not disturbed the area in recent years. The land has recently been acquired by the Nature Conservancy, but it remains vulnerable to collectors because it still remains without legal protection.

Two Florida cactus of the Cereus genus face threats from private collecting and vandalism with guns and machetes. Cereus robinii, the Key tree-cactus, is a listed endangered species found on the Florida Keys and in Cuba. The Florida population is on both private and public lands. About ten years ago, a nursery reduced populations of several Cereus species, including C. robinii, from one isolated grove on the key. Cereus eriophorus was var. fragrans, the fragrant wooly cactus, was proposed as endangered in March. The population is limited to 14 plants on private lands adjacent to a state park. Authorities suspect that plants were collected only recently. This plant is also threatened by motorcycle use of the area.

Rhododendron chapmanii, the Chapman's rhododendron, is one of the lovelist of the native rhododendrons with brilliant pink blossoms. Listed as endangered, it is native to the pinelands of Florida. Before the listing, one of only four known populations was totally eliminated when its location was discovered by collectors. The fact that propagated plants are offered for sale is evidence of a continuing interest in this species.

Even the less beautiful or conspicuous species are subject to collecting. Acanthomintha obovata ssp. duttonii, the San Mateo thornmint, is a small herb with a remaining population of only 2,000 to 3,000 plants located in a county park. In 1983, several large chunks of turf, including soil, were removed by one or more collectors.

NRDC, NPSO, NEWFS, Waimea Arboretum and Mrs. Collard ask the Subcommittee on Environmental Pollution to correct many of the deficiencies in the Act by adopting the following amendments:

- 1) amend Section 9(a)(2)(B) to read as follows:

"remove and reduce to possession any such species from any area under Federal jurisdiction; maliciously damage or destroy any such species on any such area; or remove, cut, dig up, or destroy any such species on any other area without the consent of the owner or manager thereof;"

- 3) insert a new subsection 9(a)(2)(C):

"possess, sell, deliver, carry, transport or ship, by any means whatsoever, any such species taken in violation of subparagraph (B);"

reorder the remaining subsections accordingly.

The proposed amendments would outlaw destruction as well as collection of endangered plants on federal lands, and collection and intentional destruction of such plants on non-federal lands without the permission of the landowner. The amendments would also prohibit possession and exchange of endangered plants that have been taken in violation of the preceding subsection, *i.e.*, collected from federal lands without a permit or from non-federal lands without the permission of the landowner.

The protection that is provided by the Act is undermined by extremely lax enforcement. Since the plant trade controls of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) came into effect 10 years ago, only one plant dealer has been prosecuted for violating the treaty. Not one person has been prosecuted for trading plant species contrary to the Act. The Fish and Wildlife Service and Animal and Plant Health Inspection Service (APHIS) have failed to act despite being in possession of documented allegations of violations. NRDC knows that the two agencies have been alerted to at least half a dozen alleged violations of CITES and two of the Act during this period. The former included exports of the California pitcher plant from Oregon and terrestrial orchids from New England that directly harmed members of the NPSO and NEWSF.

Furthermore, the FWS and APHIS have delayed establishing clear policies on how to handle plant shipments for which CITES documents appear to be improper. Failure to resolve this issue has resulted in allowing importation of at least 58,000 wild-collected cycads from the Dominican Republic over a 2-year period. Since similar problems plague imports of orchids from Brazil, succulents from Madagascar, cyclamens from the Middle East and other CITES-protected species, the repercussions are alarming.

Finally, the FWS has allowed major errors to appear in the annual reports that it prepares pursuant to CITES and has failed to act promptly to correct them. For example, in 1982, almost half the cactus exports with CITES permits were accidentally left out of the report. Preliminary data for 1983 indicate errors of similar magnitude, *i.e.*, 40-60% for cactus imports and exports. These errors distort American and indeed world-wide understanding of the plant trade and its impact on wild population. They also undermine efforts to detect violations by comparing data in several countries' reports.

The Natural Resources Defense Council, Native Plant Society of Oregon, Waimea Arboretum, New England Wildflower Society, and LaVerne Collard ask the Subcommittee to include report language instructing the FWS and APHIS to improve their enforcement of the ESA and CITES.

Prepared by
Faith Thompson Campbell
Plant Conservation Project
Natural Resources Defense Council
1350 New York Avenue, N.W., Suite 300
Washington, D.C. 20005

NWRA



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April 17, 1985

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The Honorable John Chafee

Chairman

Senate Subcommittee on the Environment
Committee on Environment and Public Works

Washington, D.C. 20510

Dear Senator Chafee:

Attached hereto,* please find a copy of the resolutions adopted by the delegates to our national convention in Phoenix, Arizona, November 14, 1984. You will note that Resolution 84-12 states our position on endangered species which reads:

1. That Congress take immediate steps to:

a. Amend the Endangered Species Act of 1973, as amended, to provide in the application thereof for a balance between human requirements and the species of wildlife allegedly endangered;

b. Amend the law to prohibit use of the Act to impair, supersede, or abrogate the development of rights to water, water and power projects, and reservoir sites obtained under state law and Interstate Compacts;

c. Amend the law to clearly support maintaining endangered species through artificial propagation and other non-flow management alternatives;

d. Amend the law to more clearly describe the relationship of Section 7 consultation with the development of recovery plans and the denomination of areas of critical habitat;

e. Amend the law to require a detailed decision document containing all data and scientific analysis concerning the designation of species or subspecies, habitat or finding of jeopardy from a proposed project or action; or

*Retained in committee files.

NATIONAL WATER RESOURCES ASSOCIATION

- f. Amend the law to prohibit protection of subspecies; or
 - g. Repeal the law.
2. That the Department of Interior, when petitioned by an affected state legislature or governor, take immediate steps to review, document, reconsider and, where appropriate, rescind its previous action in its administration of the Endangered Species Act of 1973. Such action should include public hearings in each state's affected area.

In support of the above resolution, we offer the following statement:

In 1973, the United States Congress, after consideration of the endangerment of a variety of the larger mammals of the world, including the african elephant, the timber wolf, the grizzly bear, and such animals which are important natural resources deserving of man's admiration and protection, passed into law the Endangered Species Act of 1973 (87 Stat. 884).

The Fish and Wildlife Service of the Department of the Interior has determined a variety of species of wildlife to be endangered. The Administration of the law by the Service has been exceedingly biased, and the alleged endangerment of a variety of unimportant and inconsequential species has been utilized as a means and method of precluding or impeding worthwhile resource development. These determinations have put nonhuman species above the human species.

The Service, as one means of recovery, usually proposes the artificial planning, stocking, or reintroduction of endangered species into habitat areas in which such species were purportedly present at some time prior to the utilization of such species are declining. The mere purported presence of an endangered species in an area can impede development, and the artificial planting, stocking, or reintroduction of a species is, at best, a marginal endeavor, the purpose of which becomes highly suspect. At the same time, responsible artificial propagation efforts could be an effective means to avoid water flow requirements which would interfere with State water laws and compact entitlements.

The Service is proposing flow maintenance requirements in the Colorado River Basin which may interfere with development of compact allocations by states signatory to the Colorado River Compact. A similar effort by the Service is apparently underway in the South Platte River Compact. The target flows will apparently be maintained through conditions imposed on Federal permits and regulatory approvals, rather than the Federal Government acquiring water rights in an appropriate manner in accordance with methods outlined by the United States Supreme Court in California v. United States, 438 U.S. 645 (1978).

The amendments to the law adopted by Congress in 1978 were for the purpose of rendering the law more workable for the original purposes intended, and to achieve a balance in the application thereof; however, the law as yet administered, and as it is being utilized, is still a means to preclude or impede resources development, and will continue to be so abused unless and until amended by Congress and reasonably interpreted by the Executive Branch. The Service should be instructed immediately that Solicitor Coldiron's opinion of September 11, 1981, holding that Federal non-reserved water rights do not exist, means that the United States must proceed under Section 5 of the Endangered Species Act to acquire water within state law systems, if it wishes to provide water for purposes under the Endangered Species Act.

Insufficient data, scientific analysis, or even organization of the data has often characterized decisions by Federal Agencies concerning designation of species as endangered, identification of critical habitat, or impact of proposed projects upon the species or habitat area. Worthwhile projects have been significantly delayed, made more costly, or entirely prohibited, yet subsequent examination of the data and rationale for the government agency decisions has found insufficient basis for the agency decision. Recent experiences with the snail darter, the squawfish, the whooping crane and the least tern illustrate the need for better data base development and decision making.

Decisions concerning designation of a species as endangered, or a habitat as critical, or that a project will likely adversely impact survival of the species must be firmly proven and based on reasonable data and scientific evidence. Such data and decisions should be documented in a detailed decision document with the evidence collected, analyzed and decision justified.

We also wish to bring to your attention the fact that the 10th Circuit Court of Appeals has held that the Corps of Engineers under Section 404 of the Clean Water Act has the authority to invoke the problem of endangered species to override State supremacy in the management and allocation of the water resources of the sovereign States. Interstate water compacts, equitable apportionment decrees and state water law systems have all been placed in jeopardy. The 10th Circuit Court decision has raised many serious and complicated issues which will take some time to clearly identify.

Some meaningful amendments to the Endangered Species Act need to be developed, but it is virtually impossible to prepare amendments that will 1. Preserve the thrust of the Endangered Species Act and 2. Place controls on unwarranted Federal intrusion into State water rights. For example, the 10th Circuit Court did not address the issue of state water compacts, but it has brought this essential policy of western water management into question.

To give us some time to develop amendments to achieve these twin goals, we urgently request that the current Endangered Species Act be extended for just two years. By the end of that period, we believe we can come forward with reasonable and acceptable amendments to resolve this current dilemma. Under the circumstances created by the court decision a longer extension will create severe problems for states and localities.

Working groups at the grass roots level, particularly in Colorado, Wyoming and Utah, are endeavoring to come to grips with some of these thorny issues that on balance are more hindrance than help. Within a year to 18 months, we believe these groups will develop some meaningful compromises that will find wide acceptance. So we again ask, don't tie our hands for five years. Extend the current authorization for no more than two years.

We do not believe it was the intent of Congress, when it enacted the Endangered Species Act to preclude or impede resources development, overturn compact allocations by the states, and to give priority protection to nonhuman species above the human species. We know that Tom Pitts and Gregory Hobbs, Jr. of the Colorado Water Congress will appear before your Committee on April 16, to provide testimony and answer questions relating to the extension of the Endangered Species Act. This letter is to advise you that the **National Water Resources Association** endorses and supports the position they will enunciate to the Subcommittee.

Sincerely yours,


J.W. O'Meara
Executive Vice President

Enclosure



RAPTOR REHABILITATION AND PROPAGATION PROJECT INCORPORATED

AT TYSON RESEARCH CENTER
BOX 193, EUREKA, MO 63025

April 16, 1985

Statement for The Raptor Rehabilitation and Propagation Project, Inc. on S725, Endangered Species Act of Reauthorization.

Walter C. Crawford, Jr.
Executive Director

R. Martin Perkins
Special Advisor

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Senator John H. Chaffee
Chairman of Subcommittee
on Environmental Pollution
of the Committee on the
Environment and Public Works.
Room 406
D.S.O.B.
Washington, D.C.

Dear Senator Chaffee:

In January, 1977, The Raptor Rehabilitation and Propagation Project, Inc. was established under the direction of Ornithologist Walter C. Crawford, Jr. The project operates a sanctuary for birds-of-prey at the Washington University Tyson Research Center near Eureka, Missouri. Here we provide restorative care to large numbers of raptors which come to us through agents of the Missouri Department of Conservation, the Department of the Interior's Fish and Wildlife Service, and various animal organizations and from concerned individuals.

Our major objectives: rehabilitation of injured raptors, preservation of endangered species, education, research, and captive breeding.

By extending efforts to rescue, rehabilitate and propagate raptors, we are attempting to reverse some of the abuse which man has inflicted upon these noble birds. For many years man has persecuted birds-of-prey by indiscriminate shooting, destruction of habitat and disturbance of natural breeding areas, not to mention reduction of their normal food supplies by hunting, clearing of cover and contamination of prey items by pesticides. Recently, however, the effects of pesticides appear to have abated somewhat. The ban of DDT and control of other pesticides seem to be assisting the wild populations of several raptor species.

We lend assistance by accepting injured birds, repairing their injuries, and after suitable recuperation, releasing them back into their natural environment. For some whose injuries are too serious to permit survival without assistance we provide extended care. In many cases we find potential mates for these chronic captives and attempt to propagate them. By releasing captive reared offspring that have been conditioned and trained to live in the wild, we hope to restore somewhat the essential population of our native raptors, especially endangered species. KAWP is currently working with the following species in our captive breeding program; *Bald Eagle, Golden Eagle, wedge-tailed eagle, red-tailed Hawk, Harris Hawk, Cooper's Hawk, *Sharp-shinned Hawk, *Osprey, *Peregrine Falcon, Prairie Falcon, European Kestrel, *Barn Owl, (*denotes endangered species in Missouri.)

To undertake such activities we have acquired the necessary permits from the U.S. Fish and Wildlife Service, Department of the Interior and the Missouri Department of Conservation. In order to release rehabilitated and captive reared birds, we also depend on the permission and interest of local land owners.

To alter man's attitude concerning birds-of-prey we conduct educational programs and lectures for clubs, organizations, school classes and other groups. At such gatherings we explain the role of the raptor as a valid element in the natural ecosystem. We explain the many attributes of birds-of-prey which are beneficial to man. We illustrate the beauty and biological adaptations of these birds with slides, visual aids and by bringing birds which are captive bred for the people to view and perhaps better understand.

Staff members have strong educational backgrounds as well as experience in ornithology, biology and wildlife management. In conducting these programs they further their knowledge by preparing the lectures and preparing to answer questions that will be asked by the public.

As part of our research effort we are constantly developing improved rehabilitation methods, surgical procedures, more controlled drug therapy, better veterinary procedures and falconry techniques.

Research programs currently underway include physiology, bio-telemetry, nutritions, bio-energetics, vocalization and behavior studies. Only through intense research, both in the field and the laboratory, can we gain data that will help us better understand these birds.

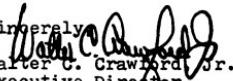
In addition, as birds come through our program we are in a position to gather data on the hazards faced by raptors in the wild. We conduct seasonal appraisals of the breeding success of raptors living in our field study areas which we visit regularly.

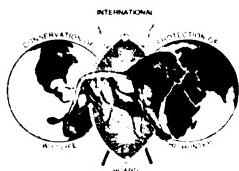
The staff has the educational and motivational background to probe these problems but needs financial support for medical supplies, food, utility bills and building materials for holding, research, and breeding facilities. Therefore we depend entirely on donations to our project. We are Incorporated and have been awarded tax exempt status by the Internal Revenue Service.

RRPP is currently involved in restoration of the Peregrine Falcon into Missouri. This species has been extinct as a breeding population since the 1880's. With funding raised by our project we will be captively producing Peregrine Falcons and releasing them into Missouri. Our organization has worked hard to help restore endangered species of birds-of-prey in Missouri. The time and money involved in these programs is extensive. It is time that professionals in the field of Ornithology are allowed to conduct our work without Government intervention. Those opposing these programs should work closely with us so they can better understand our position and goals. The future of many endangered species depends largely on the success of programs such as ours.

Wsgivings have often been expressed by naturalists about the dependence on human beings which result from attempts to build up a captive population of an endangered species. Birds bred under sheltered conditions, it is argued, become so accustomed to having food and protection provided for them that they are unable to fend for themselves in the wild. This is basically a fallacious argument. Man has so shaped the environment to his own needs over vast areas of the world that most common species of birds flourish while those endangered become even more rare. The attitudes of the general public is changing, they support conservation and endangered species research and restoration. This world is still full of dangers but endangered species stand a better chance of survival today than it would have 20 years ago. This is because of the work of programs such as ours. Our time is better spent working with our birds not having to fight legal battles. The price of saving endangered species is hard work, education and constant vigilance.

We support S725, the continuation of the Endangered Species Act of Reauthorization. RRPP goes on record in support of the continuation of the raptor exemption and would like our letter to be read as part of the record.

Sincerely,

Walter C. Crawford, Jr.
Executive Director



Safari Club International

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STATEMENT**IN SUPPORT OF****S. 725:****REAUTHORIZATION OF****THE ENDANGERED SPECIES ACT****SUBMITTED TO****THE SUBCOMMITTEE ON****ENVIRONMENTAL POLLUTION****OF****THE SENATE COMMITTEE ON****ENVIRONMENT AND PUBLIC WORKS****APRIL 16, 1985**

Safari Club International is very pleased to express strong support for S.725 -- legislation to reauthorize the Endangered Species Act through fiscal year 1990.

As you are well aware, Safari Club International is an organization of sportsmen and women dedicated to the conservation of wildlife, the protection of the sportsman's right to hunt and the preservation of sport hunting as a legitimate recreational pursuit and as an effective scientific wildlife management tool.

Formed only 14 years ago in 1971, Safari Club International ("SCI") has grown to 15,000 active members in 77 chapters throughout the United States and around the world, and with the affiliation of 37 state, regional, national and foreign sportsman organizations, SCI represents a network of more than 900,000 hunter/conversationists.

Sport hunters are the true conservationists. The United States Senate paid proper homage to the American sportsman when it noted in its report on the Endangered Species Act Amendments of 1982 that "the license-buying sportsman is recognized as an active and dependable conservationist who believes in the protection of endangered species and who finances State endangered species protection programs." (S. REP. NO. 418, 97th Cong., 2d Sess. 15 (1982)).

Sportsmen are indeed one of the most ardent supporters of the Endangered Species Act and its noble wildlife conservation and restoration goals. For instance, just this year alone, Safari Club International has presented a wildlife research grant

in the amount of \$68,250 to Zimbabwe's Department of National Parks and Wildlife Management, as well as a \$45,000 wildlife conservation grant to the National Forestry Commission of Zimbabwe. A grant in the amount of \$15,800 was recently given by SCI to the Sudanese Department of Wildlife Conservation and National Parks for the purchase of patrol motorcycles and other anti-poaching vehicles.

Closer to home, Safari Club International and its Michigan chapters recently provided the lion's share of the funding (\$25,000) for the celebrated Michigan Department of Natural Resources' translocation of moose from Ontario, Canada in an effort to restore the moose population to its historic range in Michigan. Last month, SCI presented a \$10,000 grant to the Florida State Game and Fresh Water Fish Commission to fund a disease research program on Florida's official state animal -- the panther -- which, unfortunately, is an endangered species. In fact, in the short 14-year history of Safari Club International, we have contributed nearly \$7 million to a broad range of worthwhile wildlife conservation, habitat preservation, winter relief feedings, wildlife research and anti-poaching programs.

Safari Club International fully supports the Endangered Species Act as a vital cornerstone in this nation's efforts to conserve and protect our precious wildlife resources. To this end, we propose two specific amendments:

1. Amend Section 3 of the Endangered Species Act by striking the present text in subsection 3 immediately after

"transplantation," and inserting in lieu thereof the following:

"and, in the case of threatened species,
may include regulated sport hunting, and
other regulated taking."

The United States Court of Appeals for the Eighth Circuit recently ruled to restrict the discretionary authority of the Secretary of the Interior and, in turn, the States, with respect to regulated takings of threatened species. The case of Sierra Club, et al., v. William Clark, et al., involved the planned public taking of a limited number of gray wolves (a threatened species) in certain areas of Minnesota in an effort to control widespread depredations by such species. This program was recommended by the Eastern Timber Wolf Recovery Team, the Minnesota Department of Natural Resources, and was authorized by the Secretary of Interior.

The Court stopped the planned taking when it ruled that the Secretary may not authorize a taking of a threatened species in the absence of a determination that population pressures within the ecosystem cannot be otherwise relieved. In effect, this decision seriously dilutes the distinction between the protections afforded endangered and threatened species, and represents a throwback to the pre-1973 Endangered Species Act in which listings for threatened species were incorporated.

The point of the matter is that there are many instances where the regulated sport hunting of certain species listed as threatened under the Endangered Species Act is indeed beneficial to the prospective longterm survivability of such species. The African elephant is perhaps the best known example where sport

hunting has greatly benefited this threatened species. In fact, Mr. Chairman, you recognized this important fact during a hearing on June 30, 1980 relating to the conservation of the African elephant:

Mr. VAN SLOOTEN: Included in my presentation is a letter from David Peddie, biologist with the game department of Zimbabwe. In it he states, "the elephant is of vital economic importance to the country whether from management programs or from safari hunting, and it is this fact which preserves its present status."

Senator CHAFFEE: Mr. Van Slooten, I concur with you in the point you are making here. The point you are making is that the international sport hunting of elephants provides a return for the nations involved in these steep license fees -- and they must be steep -- and thus it gives an incentive for that nation to protect the species. (SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS, S. SERIAL NO. 96-H53, 96th Cong., 2d Sess. 73 (1980)). (Emphasis added).

The key word in the above-cited excerpt is "incentive." Indeed, one of the best ways to ensure the survival of wildlife in Africa and other parts of the world is to allow the wildlife to pay for itself. As you know so well, sport hunting accrues an economic value to certain species (such as the African elephant and leopard) which may otherwise be regarded solely as vermin in that it threatens livestock. Regulated sport hunting stimulates and represents effective wildlife conservation.

While the definition of the term "conservation" found in the Endangered Species Act makes a limited reference to relieving population pressures, the statute does not lend proper recognition to the role played by regulated sport hunting as a

stimulant to wildlife populations, including threatened species. While the term "conservation" recognizes that regulated takings may be appropriate "in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved," the term does not recognize that regulated takings, such as sport hunting, have been traditionally practiced and encouraged by State agencies, and the federal government, as incentives stimulating such conservation efforts.

The decision in Sierra Club, et al., v. William Clark, et al., poses an immediate threat to the conservation of the gray wolf in Minnesota, and, if allowed to stand, poses threats to the proper conservation of other threatened species. This judicial decision sets a dangerous precedent by overturning the traditional management authority of the States. Moreover, it ill-advisedly limits those conservation methods available to the Secretary which have proven to be extraordinarily beneficial to the populations of threatened species.

Our proposed amendment would overturn the improper judicial interpretation of the Eighth Circuit Court of Appeals and would recognize that regulated takings, such as sport hunting, are indeed appropriate for certain threatened species. Therefore, Safari Club International respectfully urges the adoption of such language, thereby granting legislative relief to this unsound court decision.

2. Amend Section 3 of the Endangered Species Act by adding at the end of paragraph (2) the following:

", or lawful dealings of a sportsman with a taxidermist, guide, outfitter, travel

agent, airline or shipper."

It has been the longstanding policy of the Congress and Department of the Interior to recognize properly that regulated sport hunting does not constitute commercial activity. Aspects of a sport hunt, such as the dealings of a sportsman with his taxidermist, guide, outfitter, travel agent, airline or shipper are incidental to the primary purpose of the hunt and, as such, do not constitute commercial activity. The legislative histories to the Endangered Species Act Amendments of 1982 and the Lacey Act Amendments of 1982 reinforce this established policy. (See S. REP. NO. 418, 97th Cong., 2d Sess. 27 (1982); S. REP. NO. 123, 97th Cong., 1st Sess. 12 (1981); and H.R. REP. NO. 276, 97th Cong., 1st Sess. 21 (1981)).

Although the legislative histories substantiate such distinction between sport hunting and commercial activity, confusion and skepticism within the sportsman community inevitably recur whenever a new regulation is promulgated with respect to commercial activity involving wildlife. It is time to statutorily codify the distinction between sport hunting and commercial activity into the Endangered Species Act. Therefore, Safari Club International respectfully requests that this Subcommittee adopt our proposed amendment in a statutory fashion once and for all.

Safari Club International hereby expresses its deep concern with respect to the ongoing unregulated subsistence take of many wildlife species in Alaska. For instance, four species of geese -- cackling Canada, black brant, white-fronted and emperor --

have been decimated by illegal subsistence harvests during the spring nesting season. For example, it is very disheartening to note that there has been an estimated 95 percent population loss of cackling Canada geese in the Pacific Flyway since 1968. This dramatic decline has been attributed to the unlimited subsistence hunting and egg-gathering in Alaska.

Safari Club International is fearful that these waterfowl and other Alaskan wildlife may soon be added to the lists of the Endangered Species Act. Therefore, Safari Club International respectfully urges this Subcommittee to examine closely the effects of subsistence in Alaska to determine the nature and level of such activity which appears to be occurring to the detriment of endangered and other wildlife species.

Safari Club International hereby expresses its outrage with respect to another recently founded decision rendered by the United States Court of Appeals for the Eighth Circuit. In this instance, the Court determined that the regulations of the Endangered Species Act with respect to the taking of endangered species (bald eagles in this specific case) do not apply to Indians on reservation lands. This Court decision undermines the ongoing efforts to restore and protect the majestic symbol of our country -- the American bald eagle.

This particular Court decision subverts the integrity and effectiveness of the Endangered Species Act and other wildlife statutes enacted specifically to conserve and protect our wildlife resources. Therefore, Safari Club International respectfully urges this Subcommittee to legislatively relieve

this unprecedented judicial decision to halt the unlimited taking of endangered species by Indians on reservation lands.

Pursuant to 16 U.S.C. 1533(c), the "Secretary [of Interior] shall conduct, at least once every five years, a review of all species included in a list...." However, Safari Club International is deeply concerned that the Department of Interior has not been fulfilling its Congressionally imposed mandate to review regularly and fully the status of species listed under the Endangered Species Act and other wildlife conservation statutes. Therefore, Safari Club International respectfully urges this Subcommittee to take the opportunity of this reauthorization to remind the Department of Interior of its statutory directive to conduct full, proper and regular reviews of listed species in order to reflect accurately their status in the wild. Only in this way, can proper measures then be taken to assure the longterm survivability of viable populations.

Safari Club International believes it is imperative that the States have adequate funding to develop conservation programs pursuant to the Endangered Species Act. Inasmuch, Safari Club International in 1982 supported the increase of the federal share of funding with respect to federal/state cooperative programs established under Section 6 of the Endangered Species Act. Safari Club International supports an enlargement of federal cooperation with the States provided that the States retain their historic and traditional management authority.

Safari Club International also supports a strong Section 7 which requires Federal agencies to ensure, through consultation

with the Departments of Interior and Commerce, that Federal projects do not jeopardize a listed species or adversely affect its critical habitat. Section 7, as it presently stands, poses a fair balancing of environmental and economic factors.

In closing, Mr. Chairman, Safari Club International is very willing to work with you and your staff to ensure the reauthorization of a strong Endangered Species Act.

Thank you for this opportunity to present our views on behalf of the American sportsman.

**Testimony on the
ENDANGERED SPECIES ACT
with respect to the
BOWHEAD WHALE**

by

Mark A. Fraker

Sohio Alaska Petroleum Company

Anchorage, Alaska

March 27 1985

My name is Mark A. Fraker, and I am a Senior Environmental Scientist with Sohio Alaska Petroleum Company in Anchorage, Alaska. For more than a decade I have conducted research on bowhead and beluga whales in the Arctic. The subject of these studies has ranged from basic biology to responses to offshore petroleum operations. Prior to joining Sohio Alaska, I was in private business consulting to the Canadian and Alaskan oil industry, the Canadian Government, U.S. Minerals Management Service, and the International Whaling Commission.

Introduction

The Beaufort Sea is one of the most promising areas in North America for discovering new reserves of oil and gas. A major factor that is inhibiting exploration is the seasonal drilling restriction which has been put in place to protect the bowhead whale, an endangered species which is also the subject of important subsistence hunts by Alaskan Eskimos. This seasonal drilling restriction prohibits the oil industry from drilling in waters of the Beaufort Sea during approximately two months of each year of the fall whale migration period. In addition, there has been significant restrictions placed on marine seismic exploration, and large tracts of potentially important areas have been deleted from lease sales. The restrictions that are in place result in significant time delays and can radically increase the cost of an exploration well by tens of millions of dollars.

In the late 1970s, there was a dearth of information on movements, biology and numbers of bowheads, and on effects of offshore petroleum operations. Since then about \$20 million dollars have been spent on research addressing these questions, including over \$14 million by Minerals Management Service (MMS). In these studies it has been possible to ascertain the short-term (hours, days, weeks) and some longer-term (among years) effects. However, despite favorable research results, the National Marine Fisheries Service (NMFS) has prohibited drilling operations during the open-water season when bowheads are present. The industry and MMS are placed in a "Catch 22" situation: no drilling can take place because of a lack of information on the long-term effects, but we will never be able to determine the long-term effects until drilling is permitted when whales are present. The appropriate research has been conducted and nothing we have learned suggests serious medium- or long-term effects. The next logical step is to permit drilling when bowheads are present, with appropriate monitoring.

Population Status

The "bowhead problem" manifested itself in the mid-1970's when the International Whaling Commission became alarmed at the relatively large and increasing take of bowhead whales by Alaskan Eskimos.^{1/} The level of concern was heightened because the limited information at the time suggested that the population might have been made up of fewer than 1000 whales and there appeared to be an extremely low rate of reproduction, perhaps less than 2% per year. It is now known that there are at least 4000 whales in the population,^{2/} and probably considerably more. The annual rate of reproduction is now believed by most biologists to be a minimum of 7%.^{3/} Furthermore, the results of recent studies using calibrated aerial photographs have shown that there is a balanced distribution of whales of all size classes in the population, thus indicating a normal situation with respect to young animals growing and entering the reproductively mature part of the population. In short, all indications are that the bowhead population is biologically healthy.

A major question relates to why the Western Arctic bowhead population has not recovered to anything approaching original numbers. Based on whaling records, it is thought that there were possibly as many as 20,000 bowheads prior to commercial whaling, yet there clearly is only a fraction of that number in existence today despite the absence of commercial whaling for more than three-quarters of a century.^{4/} The most plausible explanation for this puzzle is that there were in fact two separate stocks of bowheads in the Western Arctic, one that inhabited the Bering and Chukchi Seas during summer and another that inhabited the southeastern Beaufort. Today, the former stock exists in very small numbers, if at all, due to overexploitation by the commercial whalers, while the second stock is in comparatively good condition and may in fact be as numerous today as it has ever been.

1/ Fraker, M.A. 1984. *Balaena mysticetus: Whales, oil, and whaling in the Arctic*. Sohio Alaska Petroleum Company and BP Alaska Exploration Inc., Anchorage, Alaska. p. 13.

2/ ibid., p. 24.

3/ ibid., p. 28.

4/ ibid., p. 26.

Effects of Offshore Petroleum Operations

Eskimos, environmentalist groups and government agencies have stated their concerns about possible effects on the bowhead from offshore petroleum operations. These concerns fall into two categories: (1) effects of underwater noise and disturbance, and (2) effects of oil. The MMS has spent approximately \$14 million dollars since 1979 to study the effects of offshore petroleum operations on species of endangered whales, particularly the bowhead. Much of this research was carried out in the Canadian Beaufort Sea where bowheads and petroleum operations have coexisted for about a decade. Most of the research effort has been directed at studying the response of whales to underwater noise and disturbances from normal operations, but there has also been some study of the effects of oil on skin and on baleen (the whale's feeding apparatus).

Noise and Disturbance

In the past 10 years or so it has come to be widely appreciated that marine mammals use underwater sound extensively and that sound travels underwater much more efficiently than it does in air.^{5/} Furthermore, unlike light, sound underwater is useful to marine mammals day or night, summer and winter, and in both clear and turbid water. The appreciation of the usefulness of underwater sound has led to concerns that man-made underwater sound might seriously disturb marine mammals, interfere with communication, or mask important environmental sounds.

It has been learned that bowheads and other whales react at short range (1-4km) to moving vessels.^{6/} The whales respond by moving away from the approaching vessel, and this response ends after the vessel passes. The response is greatest to vessels that move quickly and erratically, and least to vessels that move slowly and steadily.

Seismic exploration produces the most intense sounds of any offshore petroleum operation (as high as 248 dB re luPa at 1m). There have been numerous incidental

^{5/} ibid., p. 30.

^{6/} ibid., p. 36.

observations of bowheads at various distances from seismic exploration vessels.^{7/} In some cases there have been subtle, but statistically significant, differences in certain diving and surfacing parameters. In recent experiments using full-scale seismic vessels, clear responses have been obtained only at close range (5km) and high sound intensities (160 dB re 1uPa).

Bowheads respond to aircraft below 1500 ft., particularly if the aircraft circle overhead for extended periods of time. Potential disturbance by aircraft is really a concern most relevant to researchers using aircraft as observation platforms, rather than to industry aircraft following routine, straight-line tracks. Bowheads are tolerant of stationary operations such as drilling or dredging, and they have been recorded close to operations of this type on many occasions.

It is likely that bowheads find stationary operations less disturbing than moving vessels because the former are completely predictable, while the latter are less predictable particularly if the vessels are moving quickly or erratically.

Effects of Oil

There is uncertainty about the effects of oil on bowheads and other whales, in part because there has been no documented case of a whale being killed or injured by oil. The most useful information comes from laboratory experiments where oil was held in contact with small areas of the skin of captive porpoises for prolonged periods (continuously for up to 75 minutes) or test sections of baleen were deliberately fouled with oil to test effects on water flow and filtration efficiency.^{8/} Even prolonged contact with oil resulted in only mild and transient damage which was repaired within a few days. Similarly, the effects on baleen were reversible in terms of minutes, hours or days. The effects of ingestion of oil by whales have not been studied experimentally. However, it has been determined that cetaceans possess an enzyme system (cytochrome P450) capable of breaking down and detoxifying petroleum hydrocarbons.

^{7/} ibid., p. 45.

^{8/} ibid., p. 52.

Overall Effects of Offshore Petroleum Operations

Because extensive petroleum exploration operations have taken place in the Canadian Beaufort Sea since 1976, it is instructive to examine the use by bowheads of what has come to be called the "Primary Industrial Area".^{9/} Over the years 1976 to 1983, the use of this area by bowheads was as follows:

- 1976 - high
- 1977 - high
- 1978 - low
- 1979 - low
- 1980 - high
- 1981 - moderate
- 1982 - low
- 1983 - low

Thus, bowheads have not tended to make less use of this area over the eight years for which we now have data, although there have been differences between years. These annual differences probably owe to natural differences in oceanographic conditions.

Some residents of the North Slope Borough have expressed the opinion that bowheads migrating through the Alaskan Beaufort Sea in the fall have been displaced further offshore in the past few years, owing to offshore petroleum operations.^{10/} However, aerial surveys conducted by MMS since 1979 have shown a consistent pattern: the whales use a migration corridor whose landward boundary is approximately the 20m depth contour and whose seaward boundary is at least the 50m isobath. Concern has also been expressed that bowheads may have been displaced from areas just east of Pt. Barrow where they had been seen feeding in significant numbers in the mid-1970's and not again until 1984. It is likely that the location of areas of abundant food are variable, so that the whales may not use exactly the same areas year after year.

9/ ibid., p. 49.

10/ ibid., p. 51.

Conclusion

In the years since the first leases were sold in the Alaskan Beaufort, there has been an enormous increase in understanding of the biology and status of bowhead whales and of the effects of offshore petroleum operations. Yet we find a highly conservative approach to applying the results of this research and this has left the offshore petroleum industry with a very large and expensive burden which seriously impedes its ability to explore and discover the petroleum reserves that are vital to our nation's security.

Questions about effects of offshore petroleum operations do remain, and mainly these relate to long-term effects. There is nothing alarming in what we have learned from observations of short-term responses made over the past several years or from observations of bowheads in relation to the longer-term large-scale petroleum operations in the Canadian Beaufort. It must be realized that we will never have complete knowledge in this or any other area. The research questions that can be approached have been carried out, and it is apparent that there are no significant short-term impacts on bowheads from offshore petroleum operations. The major questions that remain — those dealing with long-term effects — can never be answered in the abstract. The knowledge gained from other species of whales show that they can accept a considerable degree of activity in their midst, and the results of research on bowheads is compatible with this understanding. The only way to answer on the major outstanding questions is to drill the offshore areas and monitor for effects. If effects are detected, mitigative measures can be implemented.

To conclude, the nature and dimensions of probable effects on the bowhead are well enough known that we can reasonably proceed with exploration under less restrictive regulations. Currently the oil industry is not permitted to drill when the whales are present because the long-term effects are unknown, but any long-term effects cannot be determined until drilling can take place in the presence of the bowheads. It will never be possible to prove in advance that there will be no effects from some industrial action: it is impossible to prove a negative. This question can be resolved only when NMFS will permit drilling while bowheads are present and the appropriate monitoring is conducted.

STATEMENT OF GERALD R. ZIMMERMAN, EXECUTIVE DIRECTOR
UPPER COLORADO RIVER COMMISSION
before the
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
of the
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

April 24, 1985

Mr. Chairman and Members of the Subcommittee:

The Upper Colorado River Commission is the administrative agency created by the Upper Colorado River Basin Compact of 1948. The Commission represents the States of Colorado, New Mexico, Utah, and Wyoming in matters relating to the development, utilization, and conservation of the water resources of the Upper Colorado River Basin. Because of its duty to administer the Upper Colorado River Basin Compact, the Commission has a vital interest in any reauthorization of the Endangered Species Act and in the impacts that the administration of this act has on the allocation and management of the limited water resources of the Upper Colorado River Basin.

A working group composed of representatives of the U. S. Fish and Wildlife Service, the U. S. Bureau of Reclamation, and the States of Colorado, Utah, and Wyoming, has been established to attempt to find solutions to conflicts between the protection of endangered species and water development and management in the Upper Colorado River Basin. Through a Memorandum of Understanding the above mentioned parties have agreed.

" . . . to cooperate in discussions seeking ways to develop and implement a program of reasonable and prudent alternatives which will enable Federal agency actions associated with water project development and depletions in the Upper Basin of the Colorado River to proceed pursuant to Section 7 of the Endangered Species Act without the likelihood of jeopardizing the continued existence of any threatened or endangered fishes, while fully acknowledging and considering the beneficial uses of water pursuant to the respective State water rights systems and the use of water apportioned to a State pursuant to the compacts concerning the waters of the Colorado River."

Similar efforts are being conducted in the Platte River Basin of Colorado, Nebraska, and Wyoming.

In recognition of the cooperative efforts by the Fish and Wildlife Service, the Bureau of Reclamation and the several States, the Upper Colorado River Commission commends and encourages these cooperative efforts in the administration of the Endangered Species Act. The Commission supports the use of groups

composed of States, Federal agencies, and other interested parties to achieve administrative solutions to issues such as those addressed in the Endangered Species Act. This process is consistent with the directive provided by Congress in Section 2(c)(2) of the Act which states that it is the ". . . policy of Congress that federal agencies shall cooperate with state and local agencies to resolve water resource issues in concert with conservation of endangered species."

Because of the ongoing efforts to seek administrative solutions to endangered species issues in the Upper Colorado River Basin, the Upper Colorado River Commission supports a simple two-year reauthorization of the Endangered Species Act. This two-year period will allow sufficient time for the working group to propose viable administrative solutions to the present conflicts between endangered species and water development. At the end of this two-year term, Congress should reexamine this matter to determine if such administrative solutions are workable and can be effectively implemented.

A two-year reauthorization of the Endangered Species Act would be advantageous for two other reasons as well. First, an additional two years without substantive amendments should provide sufficient time to complete the regulations required to implement the 1982 amendments to the Endangered Species Act. Second, a two-year reauthorization would provide a five-year time period from 1982, when the Endangered Species Act was last amended, to observe the effects of those 1982 amendments.

In summary, the Upper Colorado River Commission supports a simple two-year reauthorization of the Endangered Species Act in light of the ongoing attempts to achieve administrative solutions to eliminate the conflicts between the protection of the endangered species and the development, allocation, and management of the limited water resources in the Upper Colorado River Basin. Congressional acceptance of the Commission's recommendations would signal Congress' support of cooperative efforts by State, Federal, and other agencies to seek administrative solutions to endangered species issues.

On behalf of the Upper Colorado River Commission, I want to thank the members of this Subcommittee for granting us the opportunity to present our position concerning the reauthorization of the Endangered Species Act.



THE WILDLIFE LEGISLATIVE FUND OF AMERICA
To protect the Heritage of the American Sportman to hunt, to fish and to trap.

STATEMENT IN SUPPORT OF S. 725

"A Bill to Reauthorize the Endangered Species Act"

Submitted to
ENVIRONMENTAL POLLUTION SUBCOMMITTEE
of the
SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE

By
THE WILDLIFE LEGISLATIVE FUND OF AMERICA

April 16, 1985
Washington, D.C.

50 West Broad Street, Columbus, Ohio 43215 614/221-2684

The Wildlife Legislative Fund of America is a non-profit organization which protects the heritage of American sportsmen to hunt, fish and trap and protects scientific wildlife management practices by providing legislative lobbying and legal defense services. It is an association of sportsmen's and other conservation organizations at the national, state and local levels. These range from Ducks Unlimited, whose members raise and spend over \$40 million annually to acquire and maintain North American waterfowl habitat, to local rod and gun clubs. Through these organizations, WLFA represents the interests of an aggregate membership of over 750,000 conservation-minded Americans.

The Wildlife Legislative Fund supports reauthorization of the Endangered Species Act.

Sportsmen support the protection of wildlife and plants whose survival is threatened. This is in keeping with their long history of concern and activism in conservation. In the early part of this century, hunters, fishermen and trappers were the first to call for the establishment of government and private sector programs to protect wildlife from what continues to be its greatest threat -- habitat degradation and loss. When necessary, sportsmen have been the first to call for restrictions -- even outright bans -- on the taking of traditional game species.

The nation's sportsmen today continue their tradition of activism in protecting endangered wildlife. Their annual cash outlay, in the form of hunting, fishing and trapping license fees and excise taxes they bear on the sale of outdoors equipment, tops \$550 million to pay for programs to enhance game, non-game and endangered species populations. In the private sector, organizations like Ducks Unlimited, Foundation for North American Wild Sheep, The Ruffed Grouse Society, The National Wild Turkey Federation, Mzuri Wildlife Foundation and thousands of others have raised and spent hundreds of millions, if not billions, of dollars on conservation programs to further wildlife abundance and to protect wildlife species in the United States.

In its 1980 study, done in conjunction with the U.S. Bureau of the Census, the U.S. Fish and Wildlife Service reported that some 73 million Americans are annually active in hunting, fishing and trapping. These sportsmen are wholeheartedly behind the concept and practice of endangered species protection.

As Congress continues to focus on reauthorization of the Act, various interests will no doubt suggest ways to fine-tune the law so that it operates more effectively. One aspect that concerns sportsmen has to do with state wildlife agencies' abilities to properly manage species identified in the law as "threatened". Traditionally, state

wildlife agencies have been permitted to allow tightly regulated harvest of certain threatened species in those areas in which population levels were sufficient to allow limited taking. A recent U.S. Court of Appeals ruling on gray wolves in Minnesota challenges the states' authority to permit these harvests. Other species for which the ruling may have ramifications include stable populations of grizzly bears in Montana and other states and American alligators in Louisiana, Florida, Texas and elsewhere.

Biologists maintain that limited harvest of these species can be a beneficial management tool. It can provide biologists with scientific data useful in planning other management programs, can help to build good landowner relations with conservationists and can help to keep certain species from becoming habituated to man, thus reducing chances for conflicts with humans.

On balance, however, the Endangered Species Act is working well. We encourage its reauthorization.